

VSB — TECHNICAL UNIVERSITY OF OSTRAVA
FACULTY OF ECONOMICS

DEPARTMENT OF FINANCE

Financial Situation Assessment of the P&G Company

Zhodnocení finanční situace společnosti P&G

Student: Menghan Pan

Supervisor of the bachelor thesis: Ing. Miroslav Čulík, Ph.D.

Ostrava, 2015

Bachelor Thesis Assignment

Student: **Menghan Pan**
Study Programme: B6202 Economic Policy and Administration
Study Branch: 6202R010 Finance
Specialization: 01 Finance
Title: Zhodnocení finanční situace společnosti P&G
Financial Situation Assessment of the P&G Company

Description:

1. Introduction
 2. Statement of Financial Analysis Methodology
 3. Financial Situation of the P&G Company
 4. Financial Analysis of the P&G Company
 5. Results Summary
 6. Conclusion
- Bibliography
List of Abbreviations
Declaration of Utilization of Results from the Bachelor Thesis
List of Annexes
Annexes

References:

ELAINE, Henry. *International Financial Statement Analysis*. New York: Wiley, 2008. 828 p. ISBN 9780470287668.
FRIDON, Martin S. and Fernando ALVAREZ. *Financial Statement Analysis: A Practitioner's Guide*. 4th ed. New York: Wiley, 2011. 378 p. ISBN 9780470635605.
WHITE, Gerald L. *Analysis and Use of Financial Statements*. 3rd ed. New York: Wiley, 2002. 784 p. ISBN 9780471375944.

Extent and terms of a thesis are specified in directions for its elaboration that are opened to the public on the web sites of the faculty.

Supervisor: **Ing. Miroslav Čulík, Ph.D.**

Date of issue: 21.11.2014

Date of submission: 07.05.2015



Ing. Iveta Ratmanová, Ph.D.
Head of Department

prof. Dr. Ing. Dana Dluhošová
Dean of Faculty

The declaration

"Herewith I declare that I elaborated the entire thesis, including all annexes, independently."

Ostrava dated 7th May, 2015

Menghan Pan

Student's name and surname

Contents

1.INTRODUCTION.....	7
2.STATEMENT OF FINANCIAL ANALYSIS METHODOLOGY.....	8
2.1 What is financial analysis?.....	8
2.1.1 Definition of financial analysis.....	8
2.1.2 Goals of financial analysis	8
2.2 Sources of financial analysis.....	10
2.2.1 Balance sheet.....	10
2.2.2 Income statement.....	11
2.2.3 Cash flow statement.....	12
2.3 Common-size analysis.....	12
2.3.1 Vertical common-size analysis.....	13
2.3.2 Horizontal common-size analysis.....	13
2.4 Financial ratios analysis.....	14
2.4.1 Profitability ratios.....	14
2.4.2 Liquidity ratios.....	17
2.4.3 Solvency ratios.....	20
2.4.4 Activity ratios.....	22
2.5 Pyramidal decomposition and influence quantification.....	25
2.5.1 Pyramidal decomposition.....	25
2.5.2 Influence quantification.....	26
3.FINANCIAL SITUATION OF P&G COMPANY.....	29
3.1 Overview of P&G.....	29
3.2 History of development.....	29
3.3 Main productions of research.....	31
3.4 Marketing strategy.....	33
3.4.1 Multiple-brand strategy.....	33
3.4.2 Differentiated marketing.....	33
3.4.3 Advertising targeted.....	34

3.4.4 Internal competition.....	34
4.FINANCIAL ANALYSIS OF P&G COMPANY.....	36
4.1 Common-size analysis.....	36
4.1.1 Common-size analysis of balance sheet.....	36
4.1.2 Common-size analysis of income statement.....	45
4.1.3 Common-size analysis of cash flow statement.....	48
4.2 Financial analysis.....	53
4.2.1 Profitability ratios.....	53
4.2.2 Liquidity ratios.....	55
4.2.3 Solvency ratios.....	57
4.2.4 Activity ratios.....	59
4.3 Pyramidal decomposition and influence quantification.....	62
5.RESULTS SUMMARY.....	69
6.CONCLUSION.....	70
BIBLIOGRAPHY	
LIST of ABBREVIATIONS	
Declaration of Utilization of Results from the Bachelor Thesis	
List of Annexes	
Annexes	

1.Introduction

The bachelor thesis is mainly about the financial analysis of P&G company. P&G(Procter&Gamble) is the one of the world's largest daily consumer company. It was built in 1837 in America. Until now, it has more than 300 brands operated products sell well in more than 160 countries and regions, including fabric and Home Furnishing care, beauty salon, baby and family care, health care, food and beverage etc.

The goal of bachelor thesis is the financial analysis of P&G company by applying selected methods to assess the past and current financial situation. We use the common-size analysis, financial ratio and pyramidal decomposition as the main methods.

The bachelor thesis is including six chapters:

The second chapter is the description of the methods that we will use in financial analysis, which provide the knowledge for chapter four.

The third chapter is introduction of financial situation of P&G company. It including the history of the company and the special marketing strategy that why this company can get success.

The fourth and fifth chapter is the financial analysis of P&G company, which are the most important part of the whole bachelor thesis. This part is focused on the common-size analysis, financial ratios analysis, pyramidal decomposition and influence quantification by the history data during 2008 to 2012 from the company's annual report.

Finally, in chapter six, we make a conclusion with all of the data and analysis.

2.Statement of Financial Analysis methodology

In this chapter,we will introduce the methods of financial analysis that will used in following analysis.Firstly,we will explain the definition of financial analysis and it's goal.Then,three main statement,balance sheet statement,income statement,and cash flow statement.Next,we will explain the financial analysis methodology,common-size analysis and financial ratios analysis,pyramidal decomposition and influence quantification.

2.1 What is financial analysis?

In this part, we will have a general understanding of financial analysis.

2.1.1 Definition of financial analysis

Financial analysis is a kind of activities of economic management,that regard the accounting,reporting data and other related data as the basis,using a series of specialized analysis techniques and methods,to make an analysis and evaluation of profitability,liquidity,solvency and assets management in the company and other economic organizations' past and present relevant financing activities.It is for companies to investors, creditors, managers and others concerned with business organizations or individuals to understand enterprises in the past, evaluation of enterprise current situation, predict enterprise future make the right decisions and provide accurate information or basis for economic application subject.

2.1.2 Goals of financial analysis

There are three main goals of financial analysis

Firstly,master the law of enterprise production and management. The enterprise

production and operating activities, along with the development of production, the volume of business and other follow certain regularity. Different industries, due to the different characteristics of production and sales, to the occupation of the funds, the demand follows different rules. Such as commercial enterprises, the daily cash receipts and payments of large amount, commodity turnover amounted to frequent, and equipment manufacturing enterprise of each business capital demand is big, slow capital turnover, need working capital, etc.. Financial analysis is to through the analysis so as to grasp the regularity of fund movement on the relevant data, do know the score. A turnover of 1 billion RMB of the clothing company, its stock, current assets, fixed assets for the reasonable proportion between what should it be? What is the irrational structure problems that might arise? Even in the same industry, product variety, not from the same business scale and management level, and the demand and use of funds the different characteristic and law. Financial analysis, is to grasp and understand the change law of the movement of funds in enterprise production operation, for the enterprise financial management and production management service.

Secondly, understanding the business enterprise management status and existing problems. Law of enterprise production and management, which is reflected in the financial analysis of the numerical index. By comparing the numerical indicators, can be found the management problems, identify gaps, for business decision-making service enterprises. For example, assets and liabilities rate of 85%, explained that the enterprise funds only 15% is the owner of the money. The enterprise cash payment ability is negative, that enterprises are facing the payment crisis, must carry on the short-term financing activities, etc. By means of financial analysis, can timely diagnosis of enterprises "healthy" status for the enterprise decision-making and daily management services.

Thirdly, Understand the company's strengths and weaknesses, accomplish tell foregone the other, for the enterprise in the market compete and make development

strategy service. The company's strengths and weaknesses, reflected in the numerical indexes of enterprise debt paying ability, profit ability, the development potential and so on. A garment enterprises, a household electrical appliance enterprises, or in the same industry enterprises of different scales, even if their annual turnover of inventory and the end is respectively 1 billion and 20 million RMB, but with what they reveal the financial status, operating results and the enterprise's superiority and the inferiority, is very different. Through the analysis of relevant indicators, can clearly understand the business advantages and weaknesses, formulate the development strategy and management strategy. At the same time, by comparison, analysis of these indicators, can also understand the competitor's strengths and weaknesses, so as to take effective competition strategy.

2.2 Sources of financial analysis

In this part, I will introduce three basic statement of finance, balance sheet statement, income statement and cash flow statement.

2.2.1 Balance sheet

The balance sheet reflects an enterprise at a specific date (the end of month, the end of the season, at the end of the year) all the assets, liabilities and owners' rights and interests of the accounting statement, it shows that the equity at a specific date, economic resources owned or controlled by the existing obligations and the owner of the net assets of the claim. It is a static report reveals the enterprise in a certain point of the financial situation. The balance sheet by using accounting principles of balance, will conform to the principles of accounting assets, liabilities, rights and interests of shareholders "transaction subjects into" assets "and" liabilities and shareholders' equity "two parts, after entry, transfer, ledger, trial, adjustment and so on accounting procedures, in a static enterprise specific date for the benchmark, concentrated into a

report. The report function in addition to internal debugging, management direction, prevent abuse, also can let all readers in the shortest time to understand the situation of the business.

On the international balance sheet in 2008 has been changed to Statement Of Financial Position (SOFP).

According to the composition of statements, balance sheet contains the main part of the assets and liabilities of the report on the left on the right formula, the formula with the equity part. While the front end, if fully in accordance with the principles of accounting records, and through the correct entries or transfer the trial process, will make the balance sheet of the left side of the total amount of formula with exactly the same.

$$\text{Assets} = \text{Liabilities} + \text{Equity} \quad (2.1)$$

2.2.2 Income statement

The income statement, a company reports, report a certain period of time (usually one year) of the sales revenue or income received, goods sold at reasonable cost, and the remaining after costs profits (net income). The income statement also known as statement of profit and loss.

Items of the income statement, according to the profit allocation and the structure is divided into two parts. Part of the profits of listed first sales revenue, cost and then subtract out sales minus sales profits; all cost is obtained after the operating profit (or loss); plus or minus operating income and expenditure, is the total profit (loss). Profit distribution part first minus the total profits of payable income after tax profit after tax is obtained; the distribution according to the scheme from the provident fund and profit payable; if the balance, namely the undistributed profits.

$$\text{Profit} = \text{Revenue} - \text{Cost} \quad (2.2)$$

2.2.3 Cash flow statement

The statement of cash flows is the reaction in a certain period of time (such as monthly, quarterly or annual) business activities, investment activities and financing activities generated by the impact of cash and cash equivalents of financial statements. This report shows the balance sheet and income statement of cash and cash equivalents to influence, and make an analysis according to the company's business, investment and financing angle. As an analysis tool, the main function of the cash flow statement is to determine the short-term survival ability, especially the ability to pay the bill.

The cash flow statement provides a evidence whether the company is healthy or not. If a company operating activities generated cash flow to pay dividends and maintain the equity of production capacity, and it must use the loan way to meet these needs, so it gives a warning, the company in the long run is unable to maintain a normal case of expenditure. By displaying the shortage of operating cash flow generated and had to use loans to pay the dividend level cannot be permanent support the cash flow statement, which reveals the development problem of internal company.

2.3 common-size analysis

Common size analysis, means that use a common benchmark to turn the data from financial statements into percentage, making the financial statements are expressed in percentage form. This ratio indicates that the asset / liability / expense accounted for all of the assets / debt / income ratio.

Common-size analysis can be divided into two methods, one is vertical analysis, another one is horizontal analysis.

2.3.1 Vertical common size analysis

The basic points of the vertical common-size analysis of the data analysis is not the enterprise reporting period directly contrasted to obtain or variation and change rate and the base period, but by the computation of project report for the proportion of total or structure, reflects the relation between the project and the overall situation and changes in the report. As a key project of the balance sheet, income statements in the base project, with its value as 100, and the remaining items were calculated the amount of the percentage of key project amount, the percentage of each project by the proportion of the proportion, make a judgment on the project and evaluation. The percentage of the amount not only, said the financial statements is called the common ratio of the financial statements, it is a kind of important form of vertical analysis. The balance sheet of the common size statements usually by total assets as the base, profit form the common size statements usually by the total main business income as the base.

2.3.2 Horizontal common-size analysis

Horizontal common-size analysis, which will reflect the enterprise reporting period financial information and reflect the enterprise a certain period of time or history of previous financial information for comparison, a research on the development of enterprise financial changes the results of operations or financial condition analysis method.

The basic points of the horizontal common-size analysis: compared with the data of different periods in the report resources.

In general, the horizontal common-size analysis is not a single index comparison, but the analysis of a comprehensive comparison to reflect some aspects of the

situation. Calculation formula is: the number of changes in the analysis of a target = actual number of early with indicators of real number; calculation formula is: the rate of change of the rate of change (%) = the number change of the actual number of days / \times 100% (early, formula that can refer to the previous year, can also refer to a previous annual).

2.4 Financial ratios analysis

Financial ratio can evaluate the change of an investment in the years between the income, different enterprises can compare a particular point in a industry. Financial ratio analysis can eliminate the impact of the scale, to compare the different benefits and risks of enterprises, it can help investors and creditors to make rational decisions.

In general, to measure the risks and benefits we use the capacity of five aspects: Profitability ratios, Liquidity ratios, Solvency ratios, Activity ratios, and Markets ratios.

2.4.1 Profitability ratios

The profitability ratio refers to the ability of normal business profits, is the basis for enterprise survival and development, all aspects are very concerned about the index. Whether investors, creditors and managers, there is growing attention and concern the profitability of the enterprise.

2.4.1.1 Operating profit margin

Operating profit margin is the ratio of operating profit and operating income of the enterprise. It is a measure of the efficiency of business index, reflects the consideration of operating cost, the ability of managers to obtain profits by management.

$$\text{Operating Profit Margin} = \frac{\text{Operating profit}}{\text{Revenues}} \times 100\% \quad (2.3)$$

The operating profit from the income statement, including all business income of main business income and other operating income. Operating profit margin is higher, the more profit enterprises provide the merchandise sales, corporate profitability is stronger; otherwise, the ratio is low, the profitability of the business is weak.

2.4.1.2 Net profit margin

Net profit rate is an important index to reflect the company's profitability that without all costs, expenses, and enterprise income tax profit rate.

$$\text{Net Profit Margin} = \frac{\text{Net profit}}{\text{Revenues}} \times 100\% \quad (2.4)$$

$$\text{Net Profit} = \text{Revenue} - \text{Cost} \quad (2.5)$$

Net profit depends on two factors: one is the total profit, the other is the income tax rate. Enterprises income tax is legal, the higher rate of income tax, the net profit is less. China now has two income tax rates, one is for general corporate income tax rate of 25%, the total profit in 25% as revenue turned over to the state treasury; the other is to foreign investment enterprises and high-tech enterprises with preferential tax rate, income tax rate of 15%. When the business conditions, operating efficiency low income tax rate of enterprise is better.

2.4.1.3 Return on assets

Return on assets, which is used to measure how much net profit per unit of assets to create index.

$$\text{Return On Assets} = \frac{\text{Net profit}}{\text{Total Assets}} \times 100\% \quad (2.6)$$

By another way:

$$\text{Return On Assets} = \frac{\text{Operating profit}}{\text{Total Assets}} \times 100\% \quad (2.7)$$

Return on assets is one of the measure of bank profitability index which is widely used in industry field, the higher the index shows that the use of corporate assets, the better, the enterprise has obtained the good effect in increasing income and saving the use of funds, or on the contrary. Bank management strategy for management purposes, often pay very close attention to this one index. Bank regulators when analyzing the profitability, but also should pay attention to the index. Is the index compared with the same group of bank, and the bank's historical status or the longitudinal comparison. If a bank's return on assets in the first three quarters of a financial year continued to decline, when suddenly rose in the fourth quarter, to pay special attention to it. Is likely to individual banks a special adjustment of the annual report.

Limitations of the rate of return on assets is that it can not reflect the bank's cost of capital, and the rate of return on capital to make up the lack of the capital gains rate index.

2.4.1.4 Return on equity

Return on Equity (ROE) is a kind of calculation method of accounting that similar to the rate of return on investment, is used to assess the company's profitability indicators, that can be used with the profitability of different enterprises in the same industry.

$$\text{Return On Equity (ROE)} = \frac{\text{Net profit}}{\text{Equity}} \times 100\% \quad (2.8)$$

Return on equity is the average number of profit after tax divided by the total share capital at the end of the year and calculated. This is a measure of profitability index, revealed to other providers of capital payment, shareholders with capital return rate.

Equity returns are calculated according to the formula, the net income as the molecule can not reflect the performance of enterprises, so the ROE final value does not determine the value of the enterprise or the success of a reliable indicator. However, this formula still appears on many of the company's annual report.

However, the company's return on equity, high does not mean strong profitability. Part of the industry because it does not need too much capital investment, so usually have higher ROE, such as consulting company. Some industries need to invest a lot of basic construction in order to produce profit, such as oil refineries. So, not only to determine the profitability of the company ROE. Generally speaking, capital intensive industry, high barriers to entry, less competition, instead of high ROE but low asset industries are easy to enter, face greater competition. So ROE applications could be relatively the same industry.

2.4.2 Liquidity Ratios

The current ratio is the ratio of current assets to current liabilities, a measure of corporate liquidity in short-term debt before maturity, it can be turned into cash for the ability to repay debt.

Generally speaking, the higher the ratio, asset liquidity is strong, short-term debt paying ability is more strong and weak. Is generally believed that the liquidity ratio should be more than 2:1, the flow ratio of 2:1, that is two times the current assets current liabilities, even if the assets are half in the short term can not be realized, but also can ensure that all current liabilities repaid.

In this part, liquidity ratios can be divided into three methods which including current ratio, quick ratio and cash ratio.

2.4.2.1 Current ratio

Current ratio, It is also known as working capital ratio which refers to the ratio of current assets dividing by current liabilities. It is a measure of a company's ability to meet its short-term liabilities. It is the indicator to measure the company's short term risk.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Short-term Liabilities}} \quad (2.9)$$

We use current assets divided by the short-term liabilities at the end of year. This method is the main measure of liquidity at the end point of the rights and interests of the owners of enterprises accounted for the proportion.

Visible from the calculation of indicators: the higher the current ratio, the liquidity of the assets that the short-term debt paying ability is more strong. However, due to the operation of the different nature of the industry, asset liquidity requirements are also different. For example, commercial retail enterprises need liquidity, tend to be higher than the manufacturing enterprise, because of the need to invest more money in stock. In addition, the business and financial management methods also affect the liquidity ratio.

The point to remember is, the time of the flow ratio of cash to pay or return will not be considered. For example, a company without a bills today, but tomorrow there is a stack of bills, and at the same time, it also has a large number of inventory (part of floating assets), these stocks to after a long time to sell, the company demonstrated the liquidity ratio is very good, but in fact the liquidity of assets it is not strong.

2.4.2.2 Quick ratio

The quick ratio refers to the ratio of quick assets to current liabilities. It is a measure of corporate liquidity can be immediately realized the ability to repay current liabilities.

The quick assets include cash, short-term investment, notes receivable, accounts

receivable, can be realized in a relatively short period of time. The inventory, current assets within 1 years due to non current assets and other assets, should not be included in the.

$$\text{Quick Ratio} = \text{Cash} + \text{Short-term Investments} + \frac{\text{Receivables}}{\text{Short-term Liabilities}} \quad (2.10)$$

When calculating the quick ratio, inventory net current assets, because the inventory in current assets liquidation speed is slow, some stocks may slow, cannot be converted into cash.

According to the traditional experience, quick ratio remained at 1:1 is normal, it is showed that for every \$1 of liabilities of enterprises will have \$1 in cash flow to assets to offset the short-term debt paying ability, to ensure a reliable. The quick ratio is too low, the risk of short-term debt is large, the quick ratio is too high, the enterprise in the quick take up too much capital, companies will increase the opportunity cost of investment. However, these criteria are not absolute. In actual work, consideration should be given to the nature of the business sector. For example, the retail industry, because of the large amount of cash sales, almost no accounts receivable, the quick ratio is less than 1, it is reasonable. On the contrary, although some companies quick ratio is greater than 1, but most of the quick assets in accounts receivable, does not represent the enterprise debt paying ability is strong, because the accounts receivable can recover the great uncertainty. Therefore, in the evaluation of the quick ratio, but also on the quality of accounts receivable.

2.4.2.3 Cash ratio

The cash ratio is quick assets after deducting accounts receivable. The quick assets net accounts receivable after the calculated amount, can reflect the ability of the enterprise to pay current liabilities directly. Cash ratio is generally above 20%. But

this ratio is too high, it means that the enterprise has not been reasonable use of current liabilities and cash assets, profitability is low, the amount of the asset is too high will cause the enterprise to increase the opportunity cost.

$$\text{Cash Ratio} = \text{Cash} + \frac{\text{Short-term marketable investments}}{\text{Short-term liabilities}} \quad (2.11)$$

In addition, also need to pay attention, the inventory and receivables are excluded by cash ratio.

2.4.3 Solvency Ratio

Solvency ratio is the ratio of debt to judge the safety and short-term debt paying ability. Debt paying ability reflects the size of the degree of risk management to a great extent. Solvency ratios including debt ratio, debt-to-equity ratio and interest coverage.

2.4.3.1 Debt ratio

Debt ratio is the ratio of total liabilities of enterprises and all sources of funds, used to indicate that the enterprise debt accounted for the proportion of funds. Debt ratio refers to the relationship between assets and liabilities, net assets, it reflects the enterprise debt repayment of principal and payment of interest on debt the ability of \n to the asset liability ratio is also called the leverage ratio, percentage of total liabilities divided by total assets, total assets reflected in how much is through debt financing, but also can protect the interests of the creditors to measure enterprise liquidation level.

$$\text{Debt ratio} = \frac{\text{Total debt (total liabilities)}}{\text{Assets}} \quad (2.12)$$

Analysis from different parts, the asset liability ratio of the view is not the same. Creditors believe that asset liability ratio as low as possible, the lower the ratio, the more protection, the loan risk is small; from the point of view, if we can ensure that all the capital profit margin is greater than the borrowing rate, that the index of the bigger the better, or vice versa; from the angle of view, the operators of debt is too high, the enterprise is difficult to continue financing, debt is too low, so that enterprises lack vitality; from the angle of financial management, enterprise should make a balance between profit and risk, determine a reasonable capital structure.

2.4.3.2 Debt-to-equity ratio

Debt-to-equity ratio is a measure of financial leverage indicators, shows that the equity and debt assets, to establish the source of funds in proportion, calculation method for the company's long-term debt to shareholders' equity. Some investors with long-term debt required to pay interest in the calculation, but not the total liabilities. It can be used to display in comparison with the interests of shareholders, a corporate borrowing is too high.

$$\text{Debt-to-equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}} \times 100\% \quad (2.13)$$

How much the debt-to-equity ratio is better? Different companies have different situation, such as general manufacturing enterprise must first consider the net profit, the lack of funds need to be part of the interest debt should not exceed the net profit of the year 1/3, the general manufacturing enterprises, the normal operation of the assets and liabilities rate is generally 40%, converted into net asset liability ratio is about 80%. If it is a high-tech enterprise, and the product profit margin is relatively high, you can borrow some money, give full play to the positive role of financial leverage,

and corporate profit margins according to the level required for cash flow is expected to be the asset liability ratio is controlled in the range of 60% - 80%, converted into net asset liability ratio is about 150% 200%. The financial industry is a special industry, the debt ratio is very high, the higher the absorbing ability, ability or business is very strong, can have more money to make loans or investments. So to conduct financial planning according to the actual situation of enterprises, establish the rights and interests of the owners and their proportion of liabilities.

2.4.3.3 Interest coverage

Interest coverage ratio(ICR) also known as the times interest earned ratio, refers to the project in the loan repayment period can be used in the ratio of payment of interest and profit before interest and tax currently payable interest expense.

$$\text{Interest Coverage} = \frac{EBIT}{\text{Interest payment}} \quad (2.14)$$

Under normal circumstances, $ICR > 1$, said the ability of the enterprise has the repayment of interest; $ICR < 1$, said the company did not pay the interest sufficient funds, debt risks.

2.4.4 Activity ratio

Activity ratio measures how well a company use its assets. It can be divided into four types which including average collection period, accounts receivable turnover, inventory turnover and total assets turnover.

2.4.4.1 Average collection period

Accounts receivable turnover(ACP) is refers to the enterprise accounts receivable

from has the right to withdraw money, the time needed to be converted into cash. Accounts receivable turnover rate is an auxiliary index, turnover days shorter, which indicates that the flow efficiency in the use of funds. The company is a measure of how long it takes to recovery of accounts receivable, which belongs to the category of company operation ability analysis.

$$ACP = \frac{\text{Account Receivable}}{\text{Credit sales}} \times 360 \quad (2.15)$$

Since the majority of industries are the credit sales, the formation of a large number of accounts receivable, how quickly these accounts receivable recovery into real money for the company's continued operation is very important, if the turnover days, payment slow, companies will have to borrow by way to supplement working capital, will cause the rising costs and management passive. In the same industry, accounts receivable turnover days shorter companies usually have strong competitiveness. Number of days accounts receivable turnover and inventory turnover days of accounts payable turnover days minus is that it is one of the most important indicators of the company's cash flow cycle.

2.4.4.2 Accounts receivable turnover

Accounts receivable turnover(ART) is the enterprise in a certain period of time the main business income ratio of net with the average balance of accounts receivable should be. The formula is: accounts receivable turnover ratio = core business net income, the balance of accounts receivable at the end of the year. Among them, the main business income net income minus the discount and the discount is refers to the enterprise the current main business activities have made the amount of data, can be derived from the income statement.

$$ART = \frac{\text{Credit sales}}{\text{Account receivable}} \quad (2.16)$$

Accounts receivable turnover is a positive indicator, the more times that accounts receivable turnover, liquidity is strong, the enterprise accounts receivable management level is higher; the turnover times less, indicating the ability to turn into cash of receivable account is weaker, the enterprise accounts receivable management level is low.

2.4.4.3 Inventory turnover

Inventory turnover (IT) is the enterprise in a certain period of time the cost of goods sold and the average inventory balance. Inventory turnover rate to reflect, that stock liquidity and stock funds used reasonable amount, urging enterprises to ensure the production and operation of continuity at the same time, improve efficiency in the use of funds, enhance the short-term debt paying ability of enterprises.

$$IT = \frac{\text{Costs of goods sold}}{\text{Average inventory}} \quad (2.17)$$

Inventory turnover days is not the lower the better. For example, reduce inventory, can shorten turnover days, but may adversely affect the normal business activities.

2.4.4.4 Total assets turnover

Total asset turnover(TAT) is refers to the enterprise in a certain period of time with the average ratio of net income to total assets.

Total asset turnover is an important index of comprehensive evaluation and utilization of all the assets of the business management quality and efficiency. Turnover rate is high, indicating that the total asset turnover is faster, reflecting the

ability to sell more. Enterprise can through the puerile way, accelerating asset turnover, increase the absolute amount of profit.

$$TAT = \frac{Revenues}{Assets} \quad (2.18)$$

Due to the fact that the annual report includes only the beginning balance sheet at the end of the number and the number of external users of financial statements, it can be directly used at the beginning of the year the balance sheet numbers instead of year of average number of ratio analysis. This method is also applicable to other instead of using the ratio of balance sheet data calculation.

If the firm's total assets turnover increased suddenly, and the sales revenue of the enterprise is not much change, it may be this period of corporate fixed assets scrapped a cause, but not the improvement of enterprise asset utilization efficiency.

If the firm's total assets turnover rate is low, and in a low state for a long time, the enterprise should take measures to improve the efficiency of the use of the disposal of assets, redundant, idle assets, improve sales revenue, so as to improve the turnover rate of total assets.

If the enterprise capital volatility, average balance of total assets with more detailed data are calculated, such as by month calculation.

2.5 Pyramidal Decomposition and Influence Quantification

In this method, we divide the return on equity(ROE) into three parts, net profit margin, assets turnover, and financial leverage. As a profitability ratio, ROE plays an important role in a company. What else, we have three method for quantification of influence. The results are a little bit different among these three methods.

2.5.1 Pyramidal Decomposition

Pyramidal decomposition is use to analyze which factors have impact on its value or evolution. The principle is to express basic ratios as a product of component ratios. The fundamental example of pyramidal decomposition is the DuPont analysis, which is the decomposition of return to equity (ROE) ratio by three component ratios.

$$ROE = \frac{Net\ profit}{Equity} = \frac{Net\ income}{Revenues} \times \frac{Revenues}{Total\ assets} \times \frac{Total\ assets}{Equity} \quad (2.19)$$

We can decompose the profit margin as follow:

$$Net\ profit\ margin = \frac{Net\ income}{Revenues} = \frac{Net\ income}{EBT} \times \frac{EBT}{EBIT} \times \frac{EBIT}{Revenues} \quad (2.20)$$

After substitution into DuPont analysis we get:

$$ROE = \frac{Net\ income}{EBT} \times \frac{EBT}{EBIT} \times \frac{EBIT}{Revenues} \times \frac{Revenues}{Total\ assets} \times \frac{Total\ assets}{Equity} \quad (2.21)$$

2.5.2 Influence Quantification

Influence quantification is use to analyze indicators, whose change have make change in basic ratio. I will introduce three methods for quantification of influence. Method of gradual changes, Logarithmic decomposition method and function decomposition method.

2.5.2.1 Method of gradual changes

Method of gradual changes enables to quantify the change in the basic ratio caused by change in the component ratio.

The formula is:

$$\begin{aligned}
\Delta X_{a1} &= \Delta a_1 \cdot a_{2,0} \cdot a_{3,0} \\
\Delta X_{a2} &= a_{1,1} \cdot \Delta a_2 \cdot a_{3,0} \\
\Delta X_{a3} &= a_{1,1} \cdot a_{2,1} \cdot \Delta a_3
\end{aligned}
\tag{2.22}$$

Symbols:

X -- basic ratio

ΔX -- absolute change in basic ratio

a -- component ratio

Δa -- absolute change in the component ratio

Ps: $a_{x,y}$ x means component ratio and y means time

2.5.2.2 Logarithmic decomposition method

We need just one formula for the impact quantification regardless of how many component ratios we have.

The formula is:

$$\Delta X_{ai} = \frac{\ln I_{ai}}{\ln I_x} \cdot \Delta X
\tag{2.23}$$

Symbols:

X – basic ratio

ΔX – absolute change in the basic ratio

$I_x = \frac{X_1}{X_2}$ – index of change in basic ratio

$I_a = \frac{a_1}{a_2}$ – index of change in component ratio

2.5.2.3 Function decomposition method

This method works with the relative changes in basic and component ratios.

The formula is:

$$\Delta X_{a1} = \frac{1}{R_X} \cdot R_{a1} \cdot \left(1 + \frac{1}{2} \cdot R_{a2} + \frac{1}{2} \cdot R_{a3} + \frac{1}{3} R_{a2} \cdot R_{a3}\right) \cdot \Delta X$$

$$\Delta X_{a2} = \frac{1}{R_X} \cdot R_{a2} \cdot \left(1 + \frac{1}{2} \cdot R_{a1} + \frac{1}{2} \cdot R_{a3} + \frac{1}{3} R_{a1} \cdot R_{a3}\right) \cdot \Delta X \quad (2.24)$$

$$\Delta X_{a3} = \frac{1}{R_X} \cdot R_{a3} \cdot \left(1 + \frac{1}{2} \cdot R_{a1} + \frac{1}{2} \cdot R_{a2} + \frac{1}{3} R_{a1} \cdot R_{a2}\right) \cdot \Delta X$$

3.Financial situation of P&G company

In this chapter, I will make a general description about P&G company. Such as overview, history, main products of research, and marketing strategy.

3.1 Overview of P&G

P&G (Procter&Gamble) was built in 1837, which is the one of the world's largest daily consumer company. The 2003-2004 financial year, the company annual sales of \$51.4 billion. In the "fortune" magazine's latest list of the world's 500 largest industry / service industry enterprises, ranking eighty-sixth Procter & Gamble global nearly 100 thousand employees, with factories and branches in more than 80 countries around the world, more than 300 brands operated products sell well in more than 160 countries and regions, including fabric and Home Furnishing care, beauty salon, baby and family care, health care, food and beverage etc.



3.2 History of development

1837 is not the prime time of entrepreneurship. Although Cincinnati is a bustling commercial center, but the USA are suffering from the impact of the financial crisis. The country has hundreds of thousands of banks failed, the economic crisis hanging over the country. However, PROCTER and GAMBLE the two founders still decided to start their own business. They compare more attention to how to compare with the 14 other soap and candle maker, rather than a financial storm that swept the country. Their calm fully show their long-term planning strategy of business has: a later

became the Procter & Gamble Company logo management strategy. In April 12, 1837, they began to produce and sell the soap and candle. In August 22nd, two square each contributed \$3596.47, formally established relations of cooperation and partnership contract, signed in October 31st. The first production factory and office is located in Cincinnati city. "Love for you" in nineteenth Century to become the 50's company logo informal trademark. In the 60's, "Love for you" logo appears on all the company products and travel document. The invention and the use of lamps, termination of the company in twentieth Century 20 in the production of candles. The company was founded in twenty-two years, Procter & Gamble with annual sales of more than 1 millions of dollars for the first time, the staff of the company for the development of the eighty person. In 1885, the welfare of P&G was built that first Saturday afternoon not to go to work, employees may be paid on. In 1886, the Ivory factory began to work, the factory design combines the most advanced technology at the time, and at the same time pay attention to staff's working environment, which is very rare at the time. In 1887, Procter & Gamble's first built the earliest profit sharing system in American, employees in the years of October to celebrate the first dividend date. In 1890, P&G sales including ivory soap, 30 different types of soap. Creative advertising, including color advertisement in a national magazine so that more consumer awareness of P&G products, Procter & Gamble soap on the increasing demand. The company began to set up factories in Cincinnati, first set up factories in Kansas, Kansas city. Then in American set factory. The first factory America abroad in Canada's Ontario province. In 1945, Procter & Gamble has become a great company of nearly \$350 million. P&G products are popular in America and Canada. At the same time, the company began to expand overseas business through the acquisition of Thomas Hedley Co., Ltd in England. After 108 years, P&G has laid a solid foundation for the development. In 1948, P&G established the first company in Mexico among Latin America. The company established the international division, to manage the growing international business. In 1952, a new research center set up in Cincinnati City, this is the first specialized in the future technology development research center of the company. In 1987, P&G was founded one hundred and fifty anniversary, the

company was listed in the world's fifty largest companies in the "fortune" global top five hundred enterprises ranking ranks, and is the second companies with the longest history in this fifty enterprises. P&G acquired the European "Blendax" series products, including Blend-a-med and "Blendax" toothpaste. 1990 purchase of P&G "Shulton's Old Spice" product line, extend men's personal care products business. Spic and Span Pine using 100% recycled plastic packaging done, won the award for the company DuPont packaging international. In 1991, P&G bought "Max Factor" and "Betrix", the further expansion of the company business of cosmetics and perfume. Procter & Gamble bought Czech's Rakona, established the first branch in eastern Europe. The same year, in other Eastern European countries such as Hungary, Poland and Russia to set up branch. In 1993, P&G with sales of more than \$30 billion. In the company's history, international division for more than 50% of the total sales for the first time. 1993-1994 years, P&G developed joint venture in China, continuous built four companies and five production bases. P&G was awarded by the Ministry of labor America "opportunity 2000" award. This is an annual award, encourage enterprises to provide equal employment opportunity, establish a diversified workforce. In 1995, Mr. John Pepper was elected to the company the ninth chairman and CEO, Mr. Dirk was elected as the first chief company business executive. About P&G, the key to success lies in the new products are in-depth understanding of consumers and uninterrupted development of breakthrough technology, meet the needs of consumers. Review the history of the company, P&G has always been at the leading position in the research of consumer market. P&G pioneered many of the currently widely used market research techniques.

3.3 Main productions of research

P&G Company became aware of the importance of advanced technology to develop new products, and improve the existing product. In 1890, P&G Company establishes an analytical laboratory in Cincinnati IVORYDALE plant, study on how

to improve the production process of soap. It is one of the earliest laboratory USA from the history of the company established. The relentless pursuit of product research and development has brought a lot of innovative products company history. The following list is P&G years of research and development in a few cases.



- 1879 - first set of moderate and washing effect in one multiple-purpose soap-Ivory
- 1911-The first kind of pure plant baking oil-Crisco
- 1946 - the first effective synthetic detergent-Tide
- 1955 - the first containing fluorine, and proved to be clinically in preventing dental caries toothpaste-Crest
- 1956 - first has bleaching effect of cleaning agent-Comet
- 1956 - first made of soft cake mixture-Duncan Hines
- 1961 - the first Anti Dandruff Shampoo-Head&Shoulders
- 1961 - first price properly, can be a large number of listed disposable-Pampers
- 1967 - the first enzyme detergent series-Ariel
- 1968 - first re sealing of canned sweet potato-Pringles
- 1972 - first desiccant and fabric softener-Bounce
- 1972 - first to grease the strong tableware detergent-Dawn
- 1984 - the first liquid detergent, no less than the detergency detergent powder-Vizir



3.4 Marketing strategy

To overview the history of P&G company, the good grade always being with the right method in marketing. In this part, let me show the special marketing strategy of P&G company.

3.4.1 Multiple-brand strategy

Single brand extension strategies to facilitate the unification of corporate image, concentration of funds, technology, reduce the marketing cost, easy to be accepted by customers, but a single brand products is not conducive to the extension and expansion, although multiple brand and high operating costs, the risk is big, but flexible, but also conducive to market segmentation. The company name P&G does not become any kind of products and trademarks, according to market segmentation shampoo, skin care, oral and other categories, each with a brand centric operation. In China market, soap is "safeguard", toothpaste is "Crest", "whisper", sanitary plaster is shampoo is "Rejoice", "Pantene", "Head&Shoulders" 3 brands. Washing powder "Tide", "Ariel", "wash", "Potter", "century" and other 9 kinds of brand. Multiple brand frequently attack, enabling the company to establish the image of strength in customer's mind.

3.4.2 Differentiated marketing

Multiple brand strategy of Procter & Gamble does not run a product simply paste several trademarks, but the pursuit of differences between different brands of similar products, including function, packaging, publicity and other aspects, distinct personality to form each brand. In this way, each brand has its own space for development, the market will not overlap. Different customers want to get different benefits from a combination of products, some people think that the most important

capacity of washing and rinsing, some people think that the most important soft fabric, also some people want washing powder with fragrant smell, gentle alkaline characteristics. So P & G will use 9 market segments of the washing powder, designed 9 kinds of different brands. The use of a multiple product brand is divided into a plurality of market from all aspects of function, price, packaging, to meet the different levels, different needs of various customer needs, so as to cultivate consumer preferences for the enterprise a brand, improve their loyalty. Because the marginal revenue decline, to a single brand market share has increased from 30% to 40% is very difficult, but as a separate brand again, to obtain a certain market share is relatively easy, which is a single brand can achieve.

3.4.3 Advertising targeted

Toothpaste and soap mainly choose the people who is easy to influenced by bacterial and need to be protected. And the washing powder is low price, good quality, mainly for smart housewife, "Head and Shoulders" advertising strategy is the all star team, to attract fans, "VS" selection of cool not famous blonde, stylish, emphasizing individuality, want is to pursue fashion offbeat teenagers. "Rejoice" smooth, "Head and Shoulders" is to get rid of dandruff, "Pantene" is nutrition, "VS" is a professional hairdressing, "Clairol" P&G is defeated Unilever, Henkel of Germany, spending huge sums from Bristol Myers Squibb Company to buy the brand, the main position in the dyed hair, the move to construct a complete hair care Hair Coloring product line. P & G's market segmentation greatly not by function and price to distinguish, but by advertising appeals to give consumers the different psychological hint.

3.4.4 Internal competition

If there is space in a certain types of market, it's the best that "other brands" is belongs to P&G. Therefore, not only set up a brand in different types of products, in the same type of product, but also the use of brand strategy. Shampoo in the China

sales have "Rejoice", "Head and Shoulders", "Pantene", "Clairol", "VS" etc.. "Rejoice", "Head&Shoulders", "Pantene" effect and similar functions, advertising appeal and the price is almost the same except for its color, ordinary consumers could not distinguish between, if considered from the segments of the market, there is no need for. But a few big brands competition, that other companies are daunting, its new brand "Clairol", with the herb as the sign, the ad did not emphasize is Procter & Gamble products, do not use the P&G brand advantage, because the market P & G has never been involved in, the risk is big, a loss will not affect the overall can be discarded P&G.

4.Financial analysis of P&G company

In this part, we use three methods which shows in chapter 2, to analyze some details of P&G company, which includes common-size analysis, financial ratio analysis, pyramidal decomposition and influence quantification.

4.1 Common-size analysis

Common-size analysis is a method to analyze the financial statements data and their changes during a period. And it can be divided into two types, one is horizontal common-size analysis, which is the analysis of the evolution of financial statements data over time and their changes with respect to a given period as a benchmark. Another one is vertical common-size analysis, which analyzes the changes in the proportions of selected benchmarks. Analysis of the internal structure of vertical analysis method is more focused on the project inside the report. It is only on the profit statement or balance sheet do longitudinal analysis: all items in the PL table are represented by the percentage of revenues, the items in the balance sheet are expressed as percentage of total assets.

4.1.1 Common-size analysis of balance sheet

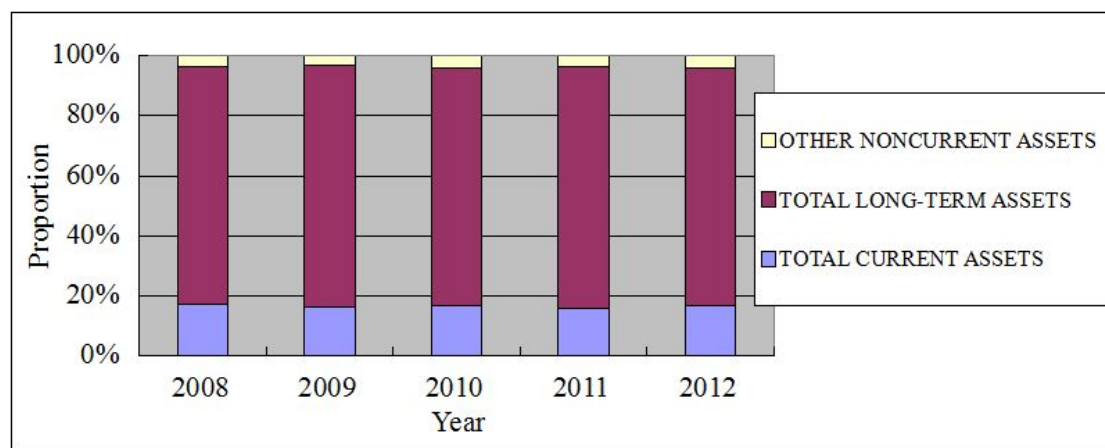
The common-size analysis of balance sheet can be divided into vertical analysis and horizontal analysis. In vertical analysis, we use the proportion of assets, current assets, non-current assets, liabilities, and equity to analyze the structure of each part. In horizontal analysis we use the growth trend of assets, current assets, non-current assets, liabilities and equity to analyze the change of them over 2008 to 2012.

4.1.1.1 Vertical analysis

Tab.4.1 The proportion of assets 2008-2012 (%)

	2008	2009	2010	2011	2012
Total current assets	17.03	16.25	14.65	15.88	16.57
Total long-term assets	79.62	80.53	68.57	82.74	79.50
Other non-current assets	3.36	3.22	3.51	3.55	3.93
Total assets	100	100	100	100	100

Chart 4.1 The proportion of assets 2008-2012

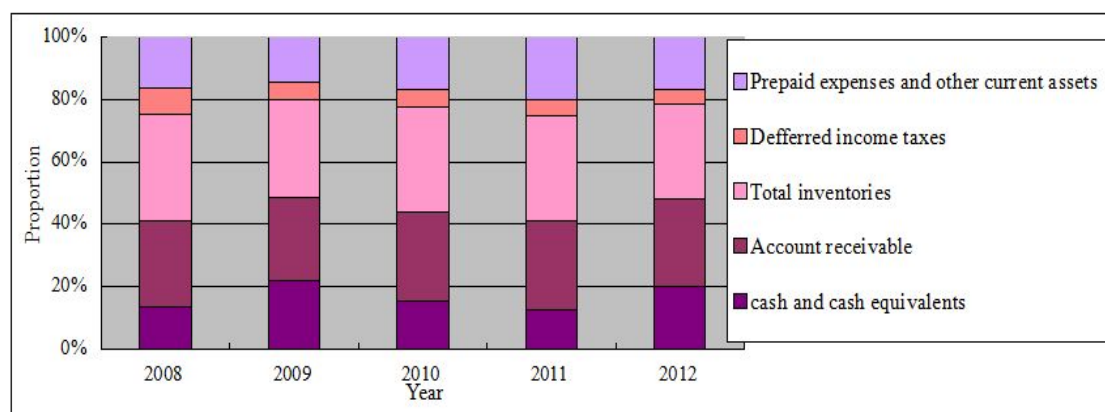


According to Tab.4.1 and Chart.4.1, we can see that the proportion of current assets of P&G company is around 16% and changes a few over five years. But the long-term assets are always occupy a high proportion, it's about 68.57% to 82.74%.

Tab.4.2 Proportion of current assets 2008-2012 (%)

	2008	2009	2010	2011	2012
cash and cash equivalents	13.51	21.83	15.33	12.60	20.25
Account receivable	27.58	26.64	28.40	28.56	27.70
inventories	34.33	31.41	33.99	33.59	30.68
Deferred income taxes	8.21	5.52	5.27	5.19	4.57
Prepaid expenses and other current assets	16.37	14.60	17.01	20.06	16.81
Total current assets	100	100	100	100	100

Chart 4.2 structure of current assets 2008-2012

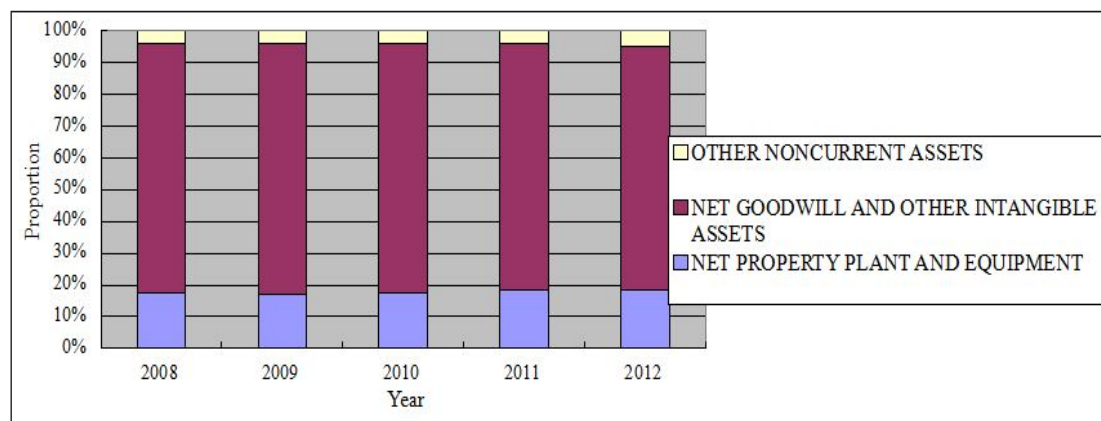


About current assets, inventories and account receivable occupy high percentages. According to Tab 4.2 and Chart 4.2, total inventories are more than 30% among total current assets, and account receivables are more than 26%.

Tab.4.3 Proportion of non-current assets 2008-2012 (%)

	2008	2009	2010	2011	2012
Property plant and equipment	17.28	17.23	17.59	18.30	18.47
Goodwill and other intangible assets	78.68	78.92	78.30	77.49	76.82
Other non-current assets	4.05	3.85	4.11	4.22	4.71
Total non-current assets	100	100	100	100	100

Chart 4.3 Proportion of non-current assets 2008-2012

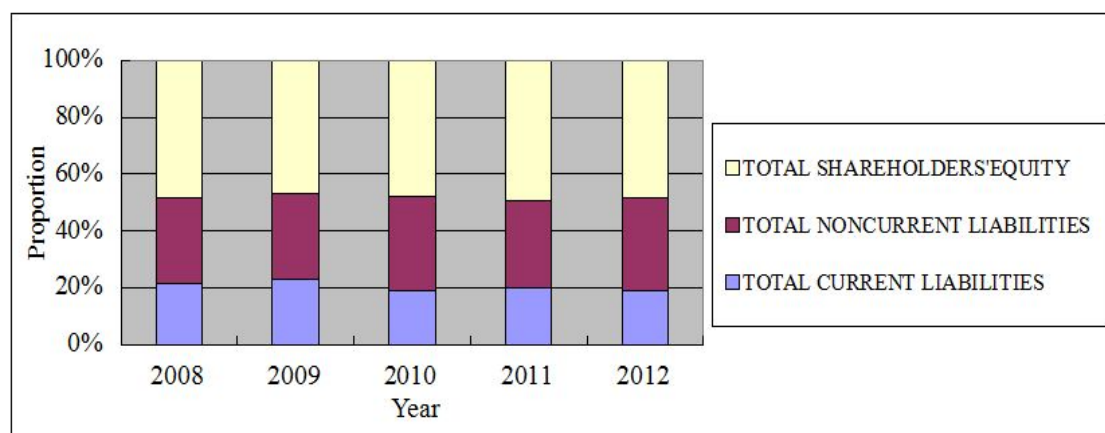


From Tab 4.3 and Chart 4.3, goodwill and other intangible assets is owns a high proportion and is stable in a degree of 76%-79%. Now we can combine these three tables and three charts: On one hand. Due to the fact that the proportion of long-term assets is very high, high liquidity and available for sales of the current assets are scare. We can get conclusion that, in general,the liquidity of the assets in P&G company is low,operation efficiency is terrible, which is not good for the company to transfer the funds if it appeared some financial troubles. On the other hand,the change of the proportion of current assets and long-term assets is small over the time, that means the company's assets structure is stable, it's good for long time development.

Tab.4.4.Proportion of the liabilities and equity 2008-2012 (%)

	2008	2009	2010	2011	2012
Total current liabilities	9.09	22.92	18.94	19.73	18.83
Total non-current liabilities	42.65	30.07	33.12	31.12	32.74
Total shareholders' equity	48.26	46.80	47.93	49.15	48.42
Total liabilities and shareholders' equity	100	100	100	100	100

Chart 4.4 Structure of liabilities and equity 2008-2012

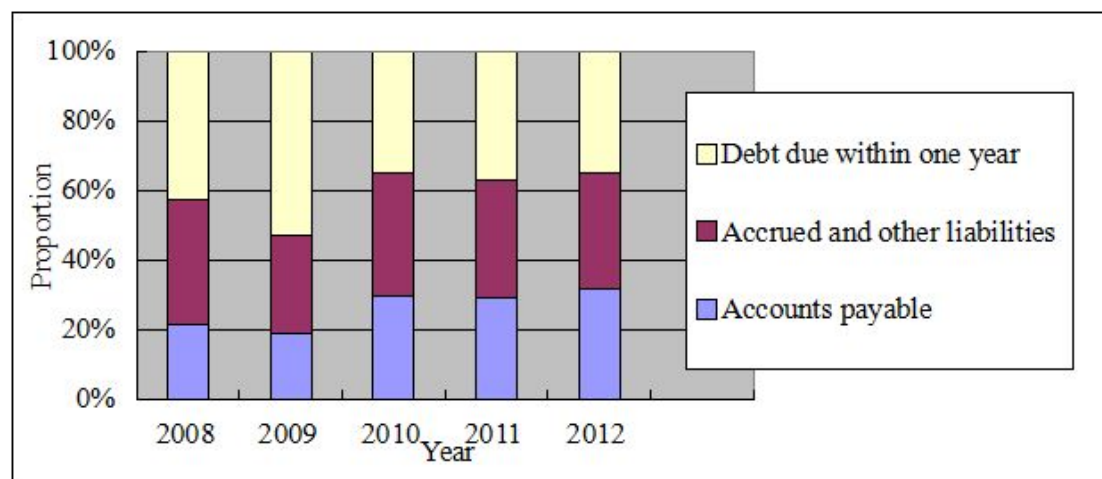


Viewing Tab 4.4 and Chart 4.4, over 2008 to 2012, the proportion of total liabilities is stable in a degree of 50%-53%, and the proportion of shareholders' equity is stable in a degree of 46%-50%. The data is normal in nowadays financial environment. If the financial environment is improving after, P&G company can moderately improve the ratio of assets to liabilities, but not more than 60%. Especially, the non-current liabilities are much more than current liabilities, about 30% to 43%, that means the company have longer time to repay a majority of total obligations the risk is low.

Tab 4.5 Proportion of current liabilities 2008-2012 (%)

	2008	2009	2010	2011	2012
Accounts payable	21.88	19.35	29.86	29.39	31.80
Accrued and other liabilities	35.85	27.83	35.25	34.04	33.28
Debt due within one year	42.26	52.81	34.89	36.57	34.92
Total current liabilities	100	100	100	100	100

Chart 4.5 Structure of current liabilities 2008-2012

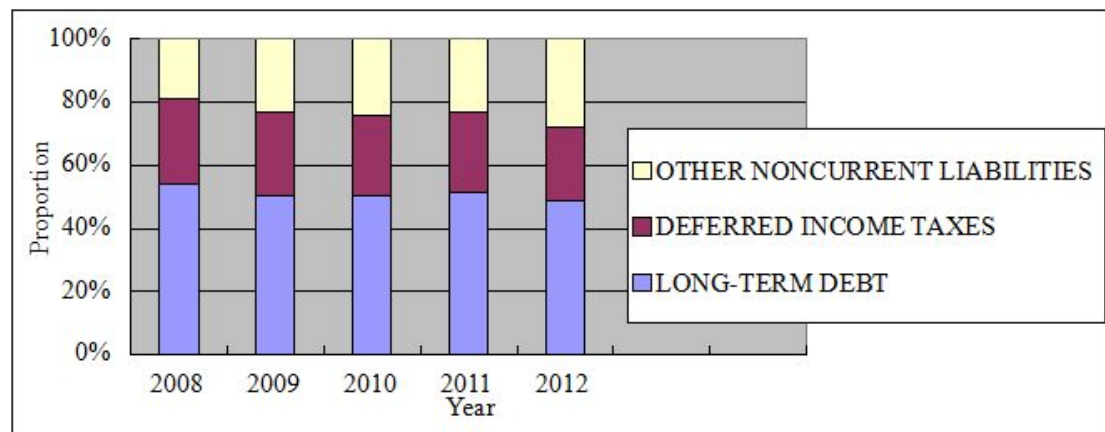


In Tab 4.5 and Chart 4.5, the most important item is “debt due within one year”, it keeps around at 34% to 53% and with a highest proportion 52.81% in 2008. The company should control this item’s proportion, if it’s too high, it will improve pressure to company.

Tab 4.6 Proportion of non-current liabilities 2008-2012 (%)

	2008	2009	2010	2011	2012
Long-term debt	54.16	50.58	50.31	51.17	48.68
Deferred income taxes	27.11	26.33	25.68	25.71	23.40
Other non-current liabilities	18.73	23.09	24.02	23.12	27.92
Total non-current liabilities	100	100	100	100	100

Chart 4.6 Structure of non-current liabilities 2008-2012



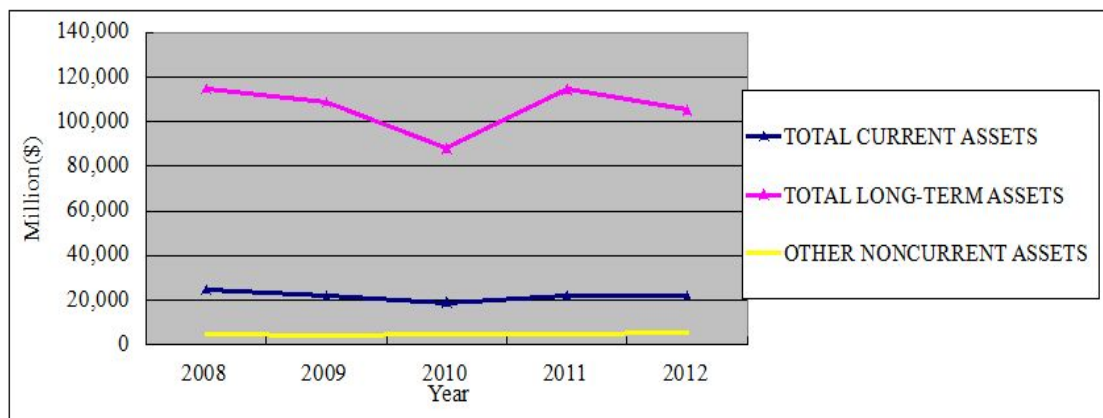
In Tab 4.6 and Chart 4.6, we can see that the most important item in non-current liabilities is “long-term” debt, the higher the proportion of long-term debt, the higher the capitalization of corporate debt, and the higher the long-term debt paying pressure. The company will not face a great lack of liquidity risk, the short term debt pressure is not. The company can bring long-term debt raise funds for the increase of fixed assets, expand the scale of operation. Now we can combine these three tables and three charts: Generally speaking, the structure of current liabilities, non-current liabilities and shareholders’ equity is normal. The company should control the proportion of short-term debt and long-term debt, improving the liquidity. The factors that can influence the long-term debt are Supply and demand situation of bank credit policies and capital market, Long term capital need of company, Maintain the rights and interests of structural stability, and To adjust the debt structure and financial risk.

4.1.1.2 Horizontal analysis

Tab 4.7 Details of assets 2008-2012

	2008	2009	2010	2011	2012
Total current assets	24,515	21,905	18,782	21,970	21,910
Total long-term assets	114,640	108,580	87,892	114,475	105,138
Other non-current assets	4,837	4,348	4,498	4,909	5,196
Total assets	143,992	134,833	128,172	138,354	132,244

Chart 4.7 growth trend of assets 2008-2012

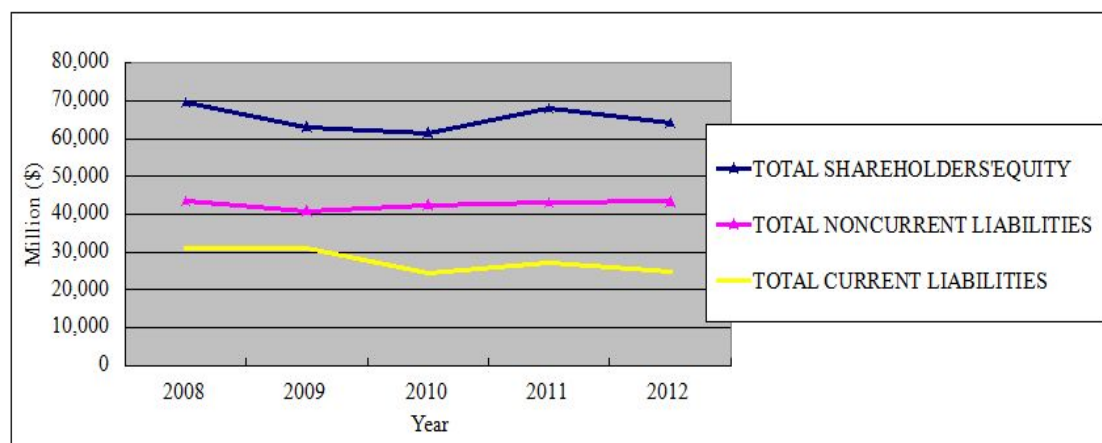


In Tab 4.7 and Chart 4.7, we can see that, during 2008 to 2012, the growth trend of assets is decreasing from \$143,992 million to \$132,224 million.

Tab 4.8 Details of liabilities and equity 2008-2012

	2008	2009	2010	2011	2012
Total current liabilities	30,958	30,901	24,282	27,293	24,907
Total non-current liabilities	43,540	40,833	42,460	43,060	43,302
Total liabilities	74,498	71,734	66,733	70,353	68,209
Total shareholders' equity	69,494	63,099	61,439	68,001	64,035
Total liabilities and shareholders' equity	143,992	134,833	128,172	138,354	132,244

Chart 4.8 Growth trend of liabilities and shareholders' equity 2008-2012



In Tab 4.8 and Chart 4.8, the growth trend of liabilities is decreasing from \$74,498 million to \$68,209 million, and the growth trend of equity is decreasing from \$69,494 million to \$64,035. As a whole, all items are decrease a little, indicating that the operation of P&G company is worse than before. The financial crisis during 2007 to 2010 might be the main reason, the supply is greater than demand led to a lot of products can not be sold, especially the daily necessities. So the company don't have enough capital to put into operation. In fact, P&G company has its own method to avoid the influence of financial crisis. First is Multiple brand strategy. About the brand, P&G's principle is, if a certain types of market have space, it will be the best if those "other brand" also belong to P&G. Multiple brand strategy makes the P&G has extremely industry market share. And P&G is good sale a variety of brands at different marketing, is not simply a brand with several labels, but the pursuit of differences between different brands of similar products, including function, packaging, advertising and other aspects, so as to form a distinct personality of each product. In this way, each brand has its own space for development, the market will not overlap. Second is Brand extension, after doing his strong area, P&G use the reliable brand effect that establish in the minds of consumers to get more areas of challenge, such as cosmetics, Home Furnishing, food and other fields have also launched its own brand, this is the effective use of brand extension paradigm, however, the brand extension is not easy, especially in the long run, will bring three hazards:

first, the success of brand extension of the brand will damage the existing, people will think you don't work for it, the original brand will gradually become blurred and is unreliable. Second, new products also will bring trouble you, people will think you are unsuited to do this , therefore, for new products, brand extension causes people not professional image, it is not good for new products. Third, brand extension means that the diversification or introduced varieties more, violates the focus strategy and proprietary strategy, scattered the company's limited resources, the result is neither of them do well. To make a conclusion,from Chart 4.7 and Chart 4.8, all of these items have a bigger decrease than the other years,then, after 2010,they become growing slowly.P&G company did the two point that just mentioned, as a result,the company did not loss too much, and become better and stable.

4.1.2 Common-size analysis of income statement

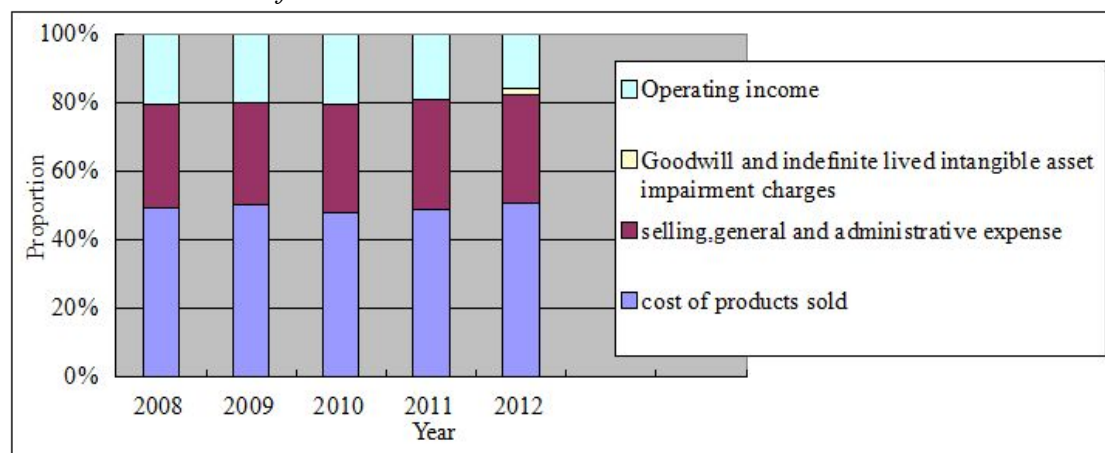
In common-size analysis of income statement, we can divided into vertical analysis and horizontal analysis.In vertical analysis, we use the proportion of revenues and costs to analyze the structure of income statement.In horizontal analysis, we use the growth trend of revenues and costs to analyze the change in income statement over the time.

4.1.2.1 vertical analysis

Tab 4.9 Proportion of revenues 2008-2012 (%)

	2008	2009	2010	2011	2012
cost of products sold	49.54	50.45	48.04	49.15	50.66
selling,general and administrative expense	30.30	29.51	31.67	31.75	31.57
Goodwill and indefinite lived intangible asset impairment charges	-	-	-	-	1.88
Operating income	20.16	20.05	20.30	19.11	15.88
Revenues	100	100	100	100	100

Chart 4.9 Structure of revenues 2008-2012

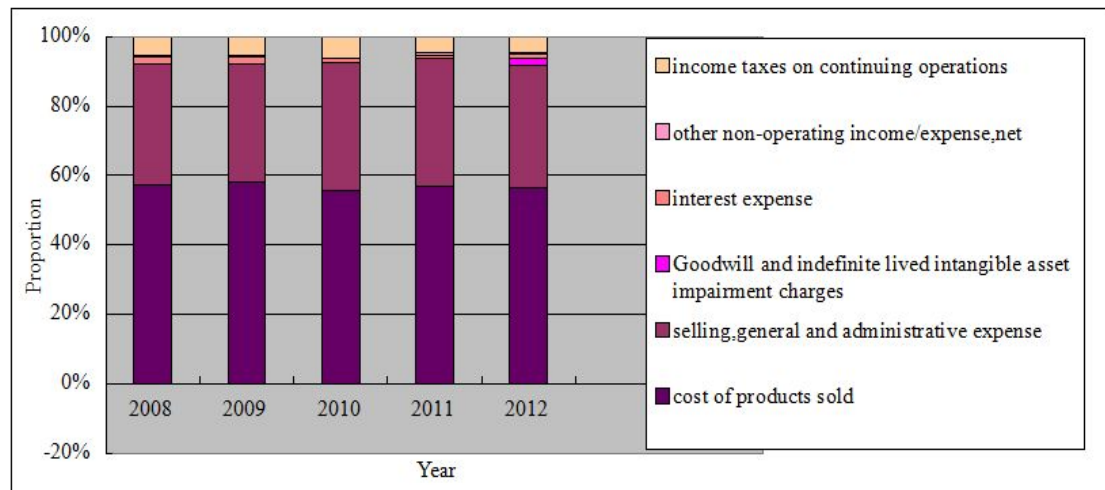


In Tab 4.9 and Chart 4.9, it shows the proportion of operating income is 15%-21%,the proportion of cost of products sold is 49%-51%, and the non-primary business costs is 30%-33% in revenues. As a whole, costs occupy a heavy position in revenue,indicating that the operating income is a small part of whole net sales. There we can calculate the operating profit margin of a company:operating income divided by revenues. Only if reduce the costs especially non-primary business costs, can the company increase the operating profit margin.

Tab 4.10 Proportion of costs 2008-2012 (%)

	2008	2009	2010	2011	2012
cost of products sold	57.14	58.03	55.82	56.88	56.61
selling, general and administrative expense	34.95	33.94	36.80	36.75	35.28
Goodwill and indefinite lived intangible asset impairment charges	-	-	-	-	2.10
interest expense	2.13	2.04	1.39	1.19	1.03
other non-operating income/expense, net	0.54	0.60	-0.04	0.48	0.35
income taxes on continuing operations	5.23	5.39	6.04	4.71	4.63
Total costs	100	100	100	100	100

Chart 4.10 structure of costs 2008-2012



In Tab 4.10 and Chart 4.10, it shows the majority of total costs are costs of products sold (55%-59%) and selling, general and administrative expense (33%-37%). Interest expense is about 1%-3%, the other non-operating income is less than 1%, and the income taxes is about 4%-7%. Generally speaking, this kind of structure of a company is reasonable, but the total costs are heavy for P&G company. To get more net profit, the company should control the amount of costs especially the non-primary

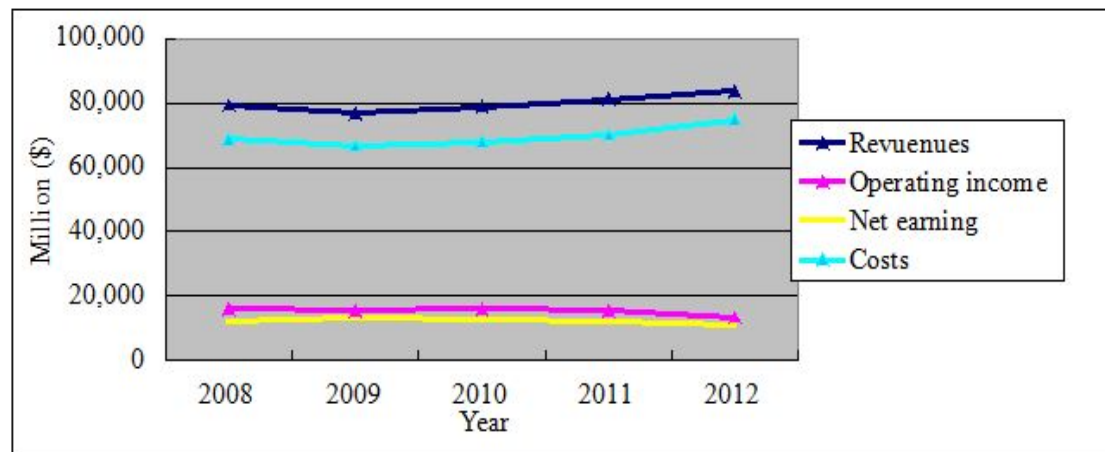
business costs.

4.1.2.1 Horizontal analysis

Tab 4.11 Details of income 2008-2012 (\$million)

	2008	2009	2010	2011	2012
Revenues	79,257	76,694	78,938	81,104	83,680
Operation income	15,979	15,374	16,021	15,495	13,292
Net earnings	12,075	13,436	12,736	11,927	10,904
Total costs	68,712	66,669	67,936	70,072	74,887

Chart 4.11 Growth trend of income 2008-2012



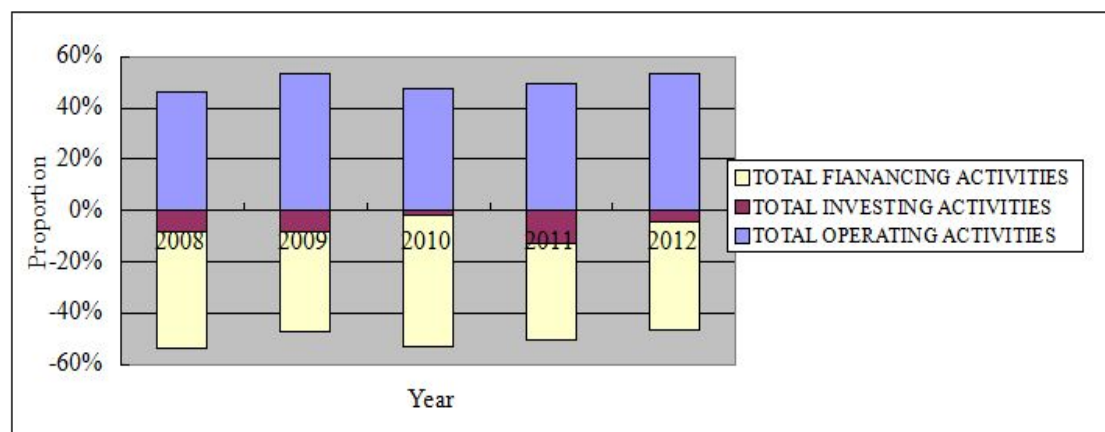
In Tab 4.11 and Chart 4.11, we can see all the items change small and move smoothly. we mention that the item costs grows more than other items, especially after 2011. The main reason may also be the financial crisis. In 2011, the harm of financial crisis slowly reduce, many enterprises began to restart the marketing method, so does P&G company. After 2011, the P&G Company has increased the cost of inputs, but the effect is not good, we can see, until 2012, net profit has not increased, but decreased a little. Maybe totally get rid of the harm of financial crisis still need a few year. We all know the financial crisis has eliminated some of the companies that didn't operation well, but P&G didn't go bankruptcy, so P&G has the strength to walk out of the shadow of the financial crisis.

4.1.3 Common-size analysis of cash flow statement

In common-size analysis of cash flow statement, we can divided into vertical analysis and horizontal analysis. In vertical analysis, we use the structure of cash inflows and cash outflows to analyze the cash situation of P&G company. In horizontal analysis, we use the growth trend of cash flows in operating activities, cash flows in investing activities and cash flows in financing activities to analyze the change in cash over the time.

4.1.3.1 Vertical analysis

Chart 4.12 Structure of cash flows 2008-2012



From Chart 4.12, it shows the cash inflow is average more than cash outflow, except 2008 and 2010.

Chart 4.13 Structure of cash inflows 2008-2012

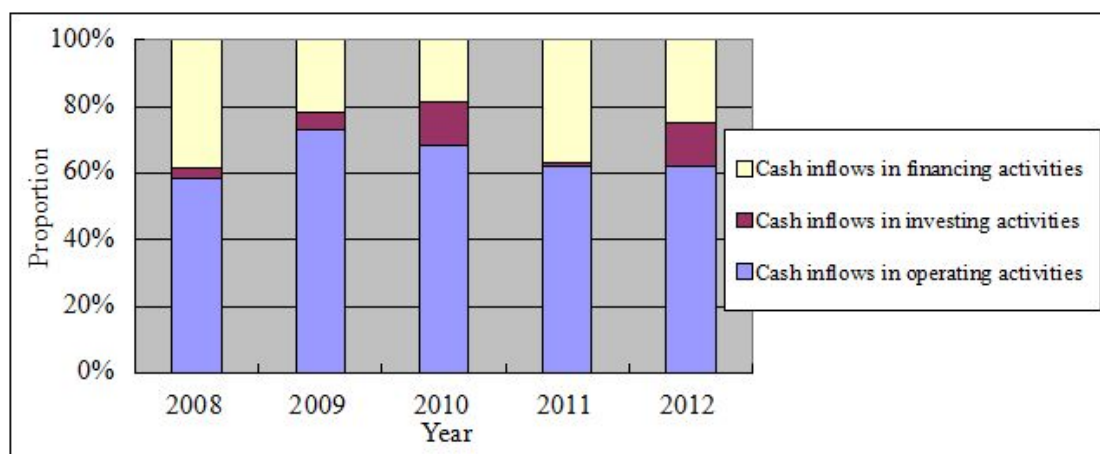
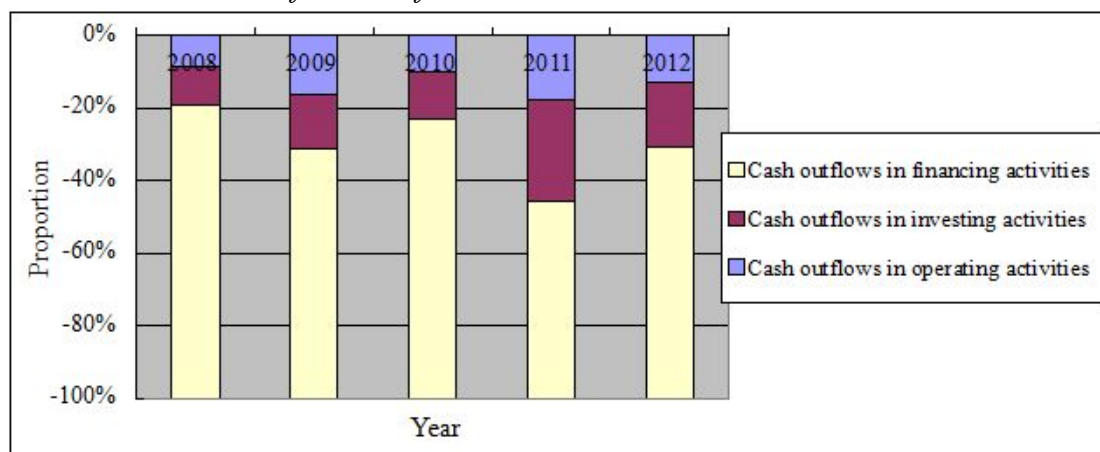


Chart 4.14 Structure of cash outflows 2008-2012

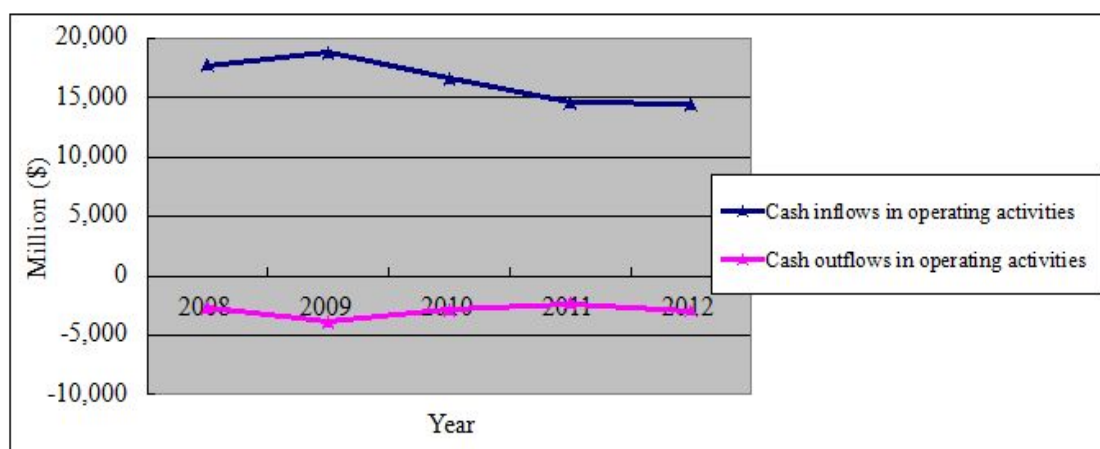


Compare with Chart 4.14, we can see in 2008 and 2011, cash outflow in financing activities is much more than the other years. We will explain it later. In Chart 4.13, it shows most of cash inflow is from operating activities, and in Chart 4.14, most of the cash outflow is from financing activities. First, cash flows in operating activities, is the cash flows from day-to-day company's activities. Cash inflows in operating activities including cash sales of goods, products or service, and collection of receivable, etc. Cash outflows in operating activities including cash payments for inventory, salary and wages payments, taxes, etc. During 2008 to 2012, the net cash flow in operating activities is positive. Company should pay more attention on the part of operating activities because most of the cash is from this part. If there is any trouble in operating activities, the company's situation will be bad. Second, cash flows in investing activities, which is as results of selling and purchasing of

investments. Investments include tangible assets (property, equipment, plant, etc.), intangible assets (know-how, patents, etc.) and long-term investments in shares and bonds. About P&G company, in investing activities, the net cash flow is negative, which means the outflow is more than inflow. If company wants to get more profit in operating activities, it need more cash inputs. It will create profits if the investment is effective. Third, cash flows in financing activities, is the cash flows from obtain and repaying capital (equity and long-term debt). Cash inflows in financing activities include cash from issuing shares or bonds and cash from credits and borrowings. Cash outflows include paying out dividends, repay bonds and repay credits and borrowings. During 2008 to 2012, the net cash flow in financing activities is negative. As we just mentioned, the outflow in 2008 and 2010 is much more than other three years, which lead to the total cash outflow is more than total cash inflow in 2008 and 2010. To give more details, in 2008, P&G company use cash in reductions in long-term debt is about \$11,747 million, and in purchasing treasury stock is about \$10,047. These two parts are most of the cash outflow in financing activities. In 2010, the main cash outflow is paying out dividend to shareholders.

4.1.3.2 Horizontal analysis

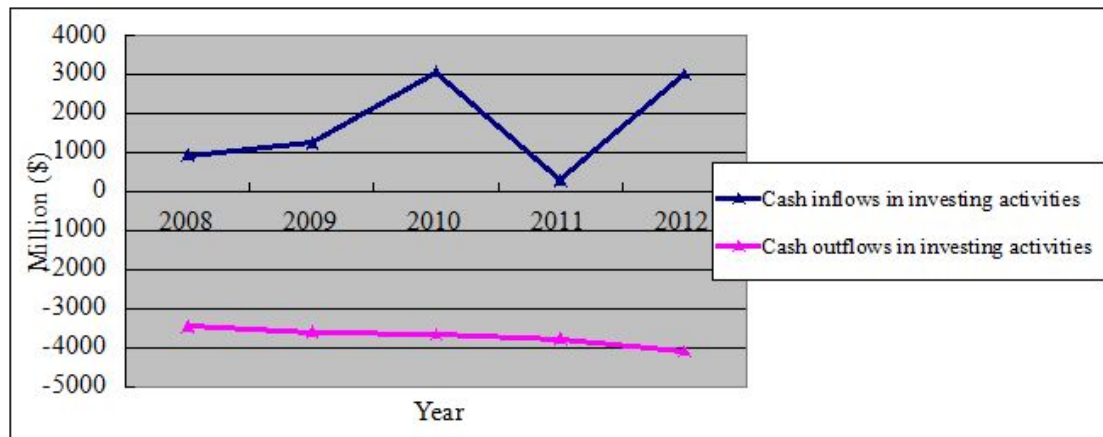
Chart 4.15 Growth trend of cash flows in operating activities 2008-2012



In Chart 4.15, we can easily see the growth trend of cash inflows and outflows are

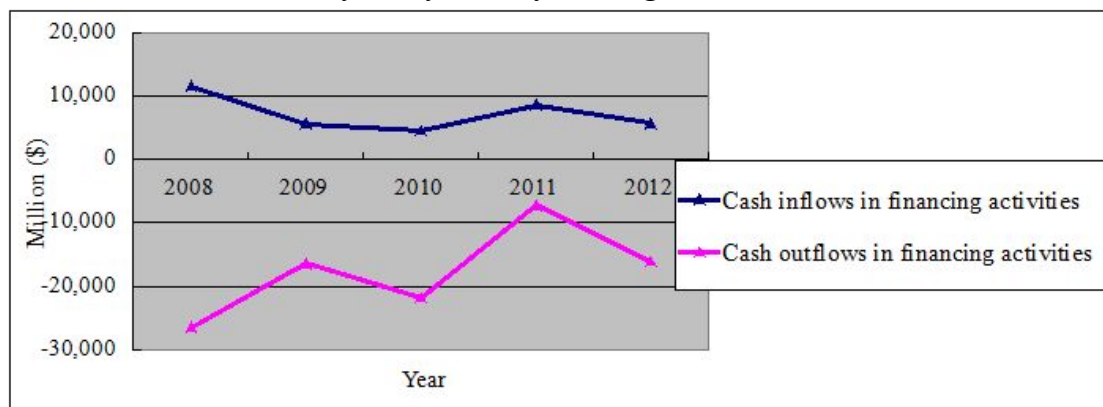
relative in operating activities, they all at biggest data in 2009 and at smallest data in 2011. Inflows are much more than outflows, this is a normal situation. The most important source of cash inflow in operating activities is net earnings item.

Chart 4.16 Growth trend of cash flows in investing activities 2008-2012



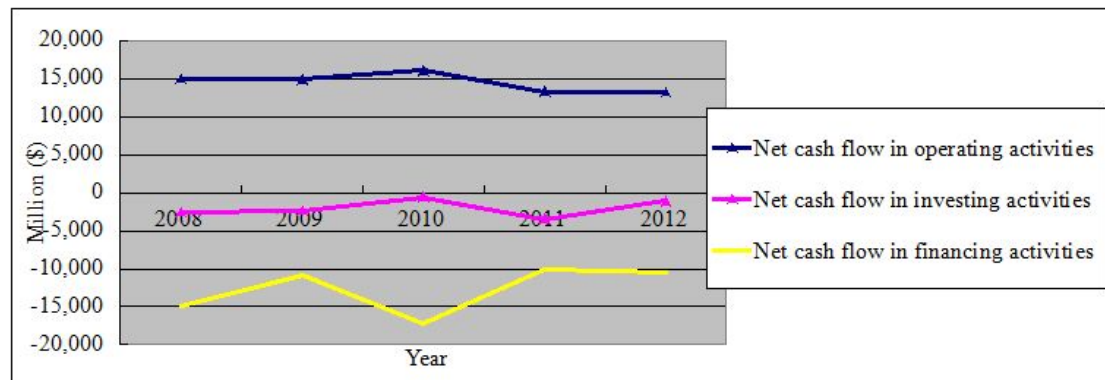
In Chart 4.16, it shows the change of cash inflows is more multivariate than cash outflows in investing activities. There are two huge increase during 2008 to 2012, they are at 2010 and 2012, that's because of the proceed from assets sales.

Chart 4.17 Growth trend of cash flows in financing activities 2008-2012



In chart 4.17, we can see an obvious change in cash outflows in financing activities in 2011 is that it decrease a lot in 2011, the main reason is the decrease of the the reductions of long-term debts item. And both of the inflows and outflows are decrease totally over the time.

Chart 4.18 Growth trend of net cash flow 2008-2012



First, we focus on Chart 4.15, Chart 4.16 and Chart 4.17. As a whole, cash inflow decrease in operating and financing activities, and increase in investing activities during 2008 to 2012. Over the time, it has a bigger change in investing activities and develop stable in operating and financing activities. Cash outflow increase in investing activities, and decrease a little in operating activities, but decrease more in financing activities and growth trend is multivariate in this part. Then, we see Chart 4.18. Generally, the net cash flows in these three parts are develop stable during the five years except the net cash flows in financing activities. There is a big decrease in 2010. Obviously, that is because of the decrease in inflows and increase in outflows. To get more details, in inflows, the mainly decreasing is addition to long-term debt and impact of stock options and others. In outflows, the mainly increasing is dividends to shareholders and reductions of long-term debt.

4.2 Financial ratios analysis

Financial ratios analysis refers to the related items in financial statements are studied, a method to reveal the financial situation of the company. In this part, we will use the method and formula which are described in chapter 2, to analyze the financial statement. The financial ratios can be divided into 4 main part, which are profitability ratio, liquidity ratio, debt ratio and activity ratio.

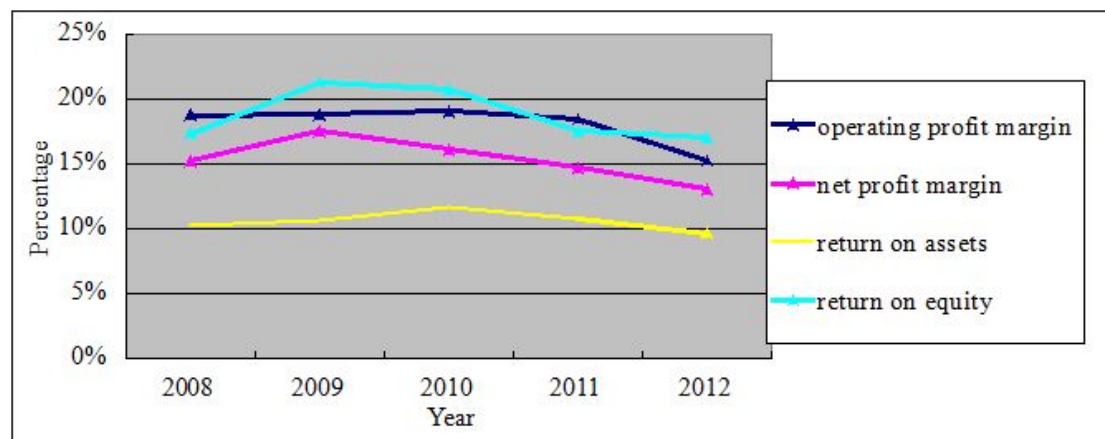
4.2.1 Profitability ratios

Profitability ratios are used to evaluate management's ability to make earnings of the company. In this part, we will use operating profit margin (OPM), return on assets (ROA) and return on equity (ROE) to analyze during a certain period.

Tab 4.12 Proportion of profitability ratios 2008-2012 (%)

	2008	2009	2010	2011	2012
operating profit margin	19	19	19	18	15
net profit margin	15	18	16	15	13
return on assets	10	11	12	11	10
return on equity	17	21	21	18	17

Chart 4.19 Growth trend of profitability ratios 2008-2012



From Tab and Chart, we can easily see that these four ratios only have a little change, they are stable over these five years. Operating profit margin keeps around in 18%, net profit margin keeps around in 16%, return on assets keeps around in 11%, and return on equity keeps around in 19%. Generally, all of the curve is on the decline. Operating profit margin measures how well the company manages its operations. From 2008 to 2011, OPM of P&G company are almost the same, it's 18%-19%. We all know that, if the costs increase, the revenues will increase, which make OPM decrease. In 2012, due to increase of the costs of products sold and general and

administrative expenses, OPM in 2012 fell to 15%. Net profit margin measures net profit per one unit of revenues as a percentage. After the highest data 18% in 2009, it decreasing over the later years. From income statement, we can see that, the selling and general and administrative expense of P&G company is only 22,630 million USD, but in 2010, it increased to 24,998 million USD, and increasing over 2011 and 2012. It is an important factor that make the net profit declined. As a result, the net profit margin will decline too. Return on assets measures the net profit as a percentage for every unit of company's assets. This data is quite stable among these five years, and the results are normal, which indicated that P&G company's assets utilization is high. Return on equity measures a company's efficiency at generating profits from every unit of shareholders' equity. We can see the trend of ROE is the most diversified in profitability ratios. It keeps around at 21% in 2009 and 2010, because the shareholders' equity are low in these two years ,that will make the results of return on equity are higher.

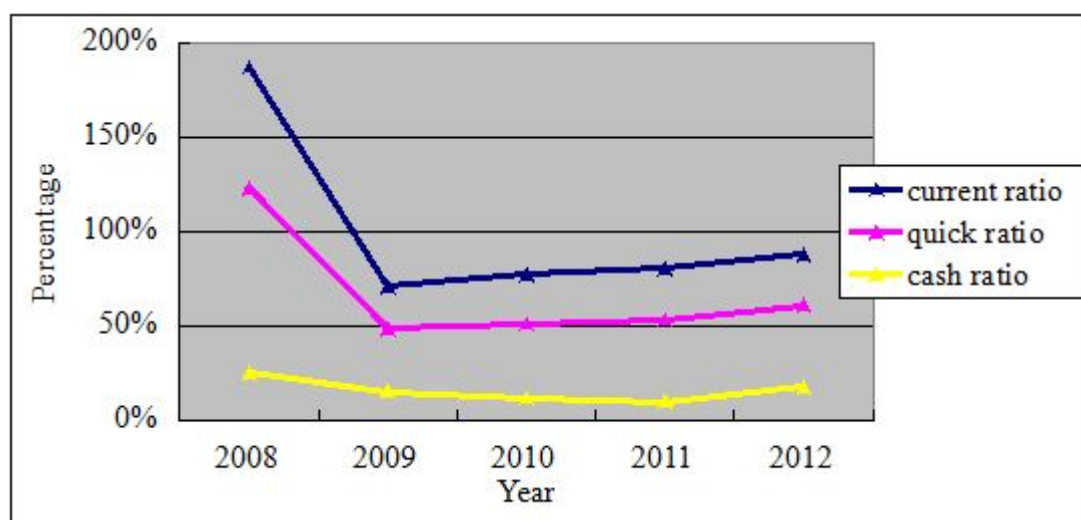
4.2.2 Liquidity ratios

Liquidity ratio is use to measure the company's ability to turn the current assets into cash to repay the debt before the maturity. Generally speaking, the higher the ratio, indicating that company's assets liquidation is strong, and the short-term paying ability is also strong.

Tab 4.13 Proportion of liquidity ratios 2008-2012 (%)

	2008	2009	2010	2011	2012
current ratio	187	71	77	80	88
quick ratio	123	49	51	53	61
cash ratio	25	15	12	10	18

Chart.4.20 Growth trend of liquidity ratios 2008-2012



Viewing Tab 4.13 and Chart 4.20. The obvious trend is that the liquidity ratios drop greatly in general from 2008 to 2009. Current ratio drops from 1.87 to 0.71, quick ratio drops from 1.23 to 0.49, cash ratio drops from 0.25 to 0.15. But after 2009, they grows slowly and continuously. Current ratio equals the current assets divided by the current liabilities, which measures amount of current assets for every unit in short-term liabilities. Because of the increasing of the debt of P&G company in 2009, the total current liabilities increases, so that the current ratio decrease in 2009, which makes a decrease in short-term obligation paying ability. After 2009, the current ratio becomes stable and the operating ability of enterprises gradually restore. Quick ratio is more stringent test of company's liquidity. After a deep decrease in 2009. In 2010, the quick ratio is 0.51, compare to the result "0.49" in 2009, it increases by two percentage points. The increase is slowly, that means the P&G company has a stable short-term obligation paying ability. The main reason is the deferred income tax is greatly reduced, the reduction of stocks, but relatively slow. In 2010 the company repaid most of the debt with one year maturity, and the substantially reducing of liabilities is far more than the speed of the reducing of current assets. Cash ratio refers to the ratio of cash in circulation and commercial bank demand deposit. Cash ratio of height and money demand is positively related to. Therefore, the factors that affect the demand for money, can affect the cash ratio. For example, bank deposit interest rates

decline, leading to interest bearing assets income reduce, people will reduce deposits in the bank rather than hold more cash, it can increase the cash ratio. Cash ratio and negatively related to monetary multiplier, cash ratio is high, the more volume that expansion of the cash out deposit money and into the daily circulation, thus directly reduces the amount of funds that can loaned of bank deposits, restricted the derived capacity, the money multiplier is smaller. In 2010 the cash ratio is 0.12, it is lower that compared with 20% general cash ratio, indicating that the ability of P&G with cash to repay short-term obligation weakened. And in 2009 with the cash ratio of 0.15, compared with 2009, the cash ratio in 2010 decreased by three percentage points, the main reason is the greatly reducing of cash assets over the speed of reducing in liabilities. At the end of the year the company's willing of held money funds stock will reduce, but relies on the non cash items to increase the operating cash flow.

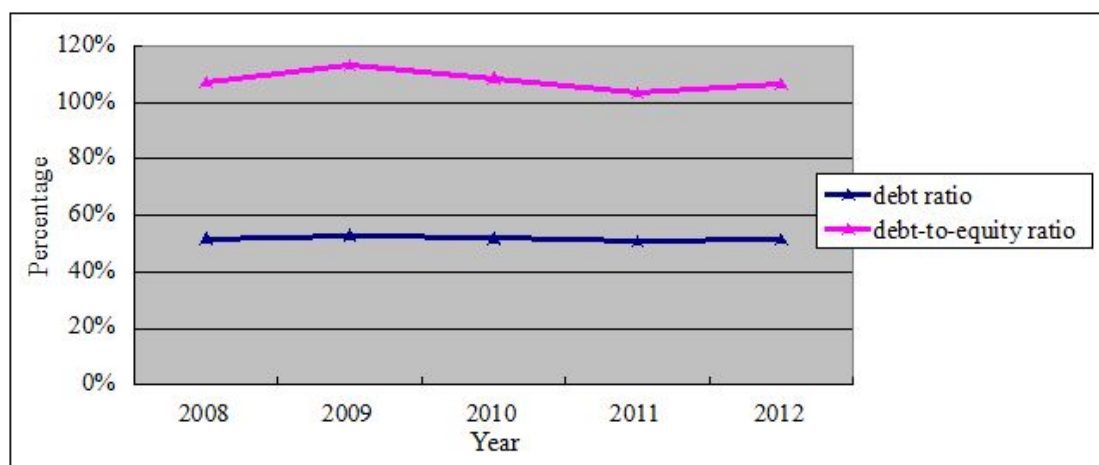
4.2.3 Solvency ratios

Solvency ratios also called leverage ratios, which measure company's ability to meets its long-term obligations and how the company is financed. The basic types of solvency ratios are debt ratio, debt-to-equity ratio and interest coverage.

Tab 4.14 Proportion of solvency ratios 2008-2012 (%)

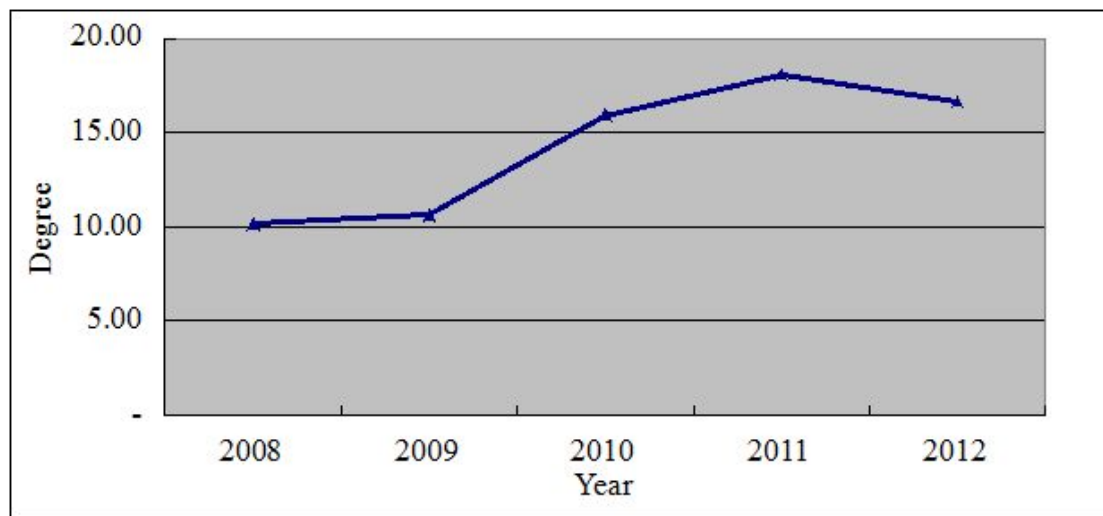
	2008	2009	2010	2011	2012
debt ratio	52	53	52	51	52
debt-to-equity ratio	107	113	109	103	107%
interest coverage	10.15	10.61	15.91	18.05	16.63

Chart 4.21 Growth trend of solvency ratios 2008-2012



Debt ratio means what percentage of the company's assets is financed by debts. It indicate how much assets are financed through debt, the index is a comprehensive index to evaluate the level of debt in the company. At the same time it is also a measure of company business activities by means of creditor capital ability index, also reflect the safety degree of the creditor loans. If the debt ratio reached 100% or more than 100% shows that the company has no net assets or insolvent. From 2008 to 2012, the debt ratio is stable and keeps around at 0.52. The data is normal, so it means the liabilities in all assets are about 52%, it's at a low risk position. Debt-to-equity ratio refers to the amount of the company's debt relative to company's equity. The lower the ratio means the higher the ability to repayment the long-term obligation. We can see from the chart that the debt-to-equity ratios of P&G company over these five years only have small change and are stable around 103% to 113%. And with the highest data in 2009, indicating that the ability of P&G company's solvency is lower in that year.

Chart 4.22 Growth trend of interest coverage 2008-2012



Interest coverage tells the extend to which the company's operating profit is able to meet current interest payments, it is basically a risk warning index, especially is more important when the company is in financial trouble. It can explain whether companies have the ability to pay interest to avoid the risk of debt, and whether there are financing ability to reverse the predicament. Obviously, the ratio of less than 1 companies have been very critical, that the company produce profits even bank interest payment is not enough. In fact, when the ratio is less than 1.5, will cause the vigilance of the investors. The interest coverage ratios of P&G company are all over 10 during 2008 to 2012, growing faster after 2009, that's a quite good data, it means P&G company has the enough ability to pay the interest to avoid the risk.

4.2.4 Asset management ratios

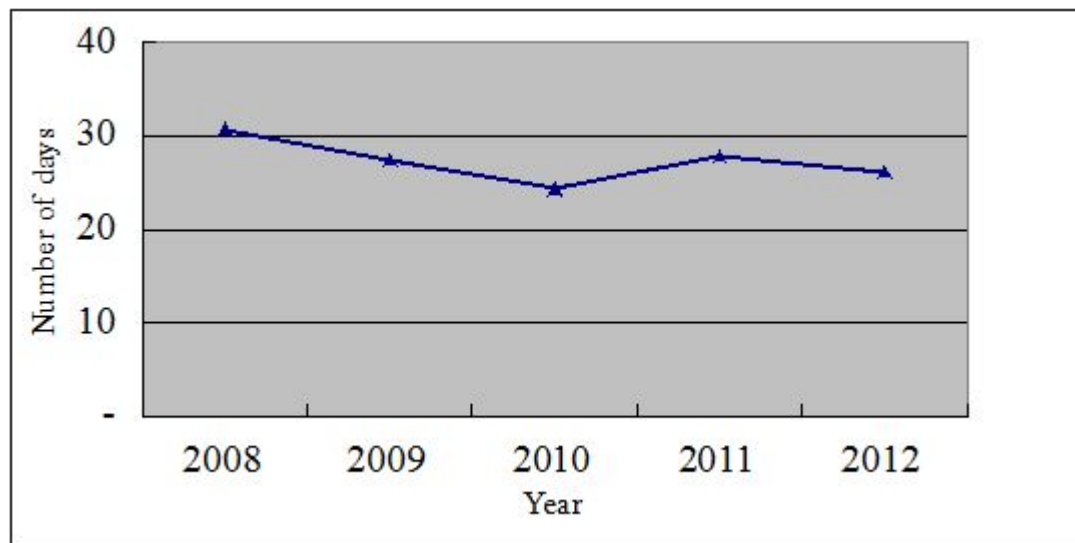
Asset management ratios indicate how much a company invested in a particular assets relative to the revenues that the assets are generating. The company's goal is to make the income maximization, cost minimization, and, since inventories and accounts receivable is a cost, then the company will want to minimize the time to hold non cash capital. For companies, the stock into accounts receivable, and then converted into cash, is a periodic operation process, if can make the process faster,

each unit can obtain income more assets. The ratios that can measure this speed including Average collection period, Accounts receivable turnover, Inventory turnover, Total assets turnover.

Tab 4.15 Details of assets management ratios 2008-2012

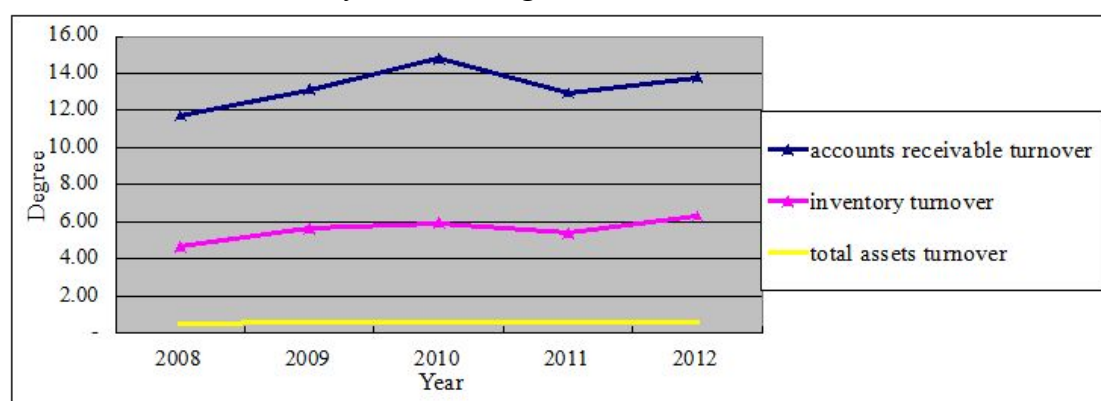
	2008	2009	2010	2011	2012
average collection period(days)	31	27	24	28	26
accounts receivable turnover	11.72	13.14	14.80	12.92	13.79
inventory turnover	4.67	5.62	5.94	5.40	6.31
total assets turnover	0.55	0.57	0.62	0.59	0.63

Chart 4.23 Growth trend of average collection period 2008-2012



First, average collection period measures the conversion of accounts receivable into cash, for example how many days it takes to collect the company's receivable. From the Tab 4.15 and Chart 4.23, we can easily see that the results over these five years are during 24 to 31 days.

Chart.4.24 Growth trend of assets management ratios 2008-2012



Accounts receivable turnover rate refers to a certain period of time (usually a year) that the average number of receivables into cash. Accounts receivable turnover rate is also called the collection ratio, is used to measure the degree of enterprise accounts receivable flow index, it is the enterprise in a certain period of time (usually a year) and the ratio of average balance of net credit sales and account receivable. Accounts receivable turnover ratio is the ratio of sales income divided by average should be accounts receivable, accounts receivable is the annual average number of converted into cash, it shows that the rate of flow of accounts receivable. With the time that the turnover rate is the receivable turnover in days, also called accounts receivable recovery period, obtained from the said enterprise accounts receivable rights to recover funds, conversion to cash required time, equal to 360 divided by the number of accounts receivable turnover rate. The inventory turnover ratio is the ratio of enterprises in a certain period of cost of goods sold and the average inventory balance. To reflect the inventory turnover rate, namely stock liquidity and stock funds accounted for the amount is reasonable, urging enterprises to ensure production and business continuity at the same time, improve efficiency in the use of funds, enhance the short-term debt paying ability of enterprises. In 2010, P&G inventory turnover is 5.94, indicating that P&G Company's inventory turnover speed is strong, high liquidity, strong ability for solvency, and that the low occupancy level of inventory, inventory backlog is not obvious. P&G as the world's largest consumer goods company, its product sales network all over the world, and most of the products for

the necessities of life, so the possibility of inventory backlog is small, and the company continued to improve inventory management. Total asset turnover ratio reflects the overall assets of enterprises operating capacity, in general, the assets turnover times more or turnover less, indicating its turnover faster, operation ability is stronger. Enterprises can use the approach that reducing profits and increasing sales, accelerating asset turnover, increase the absolute amount of profit. Analysis of the rate of inventory turnover is designed from different angles and link to find out the problems in inventory management, the inventory management to guarantee the production and business operation continuity at the same time, less operating funds, improve efficiency in the use of funds, and enhance the enterprise short-term debt paying ability, promote the enterprise to improve the management level. Nearly 5 years, the results of P & G's total assets turnover are low, meaning that the liquidity of liquid assets in the company are relatively weak, but does not explain the company operation ability is weak, because the total assets of P&G is mostly non-current assets. Because of the company's current assets mainly included by inventory and accounts receivable, so the total asset turnover rate to a certain extent reflects the company's accounts receivable and inventory turnover situation. On the one hand, the company to improve inventory management, on the other hand, the P&G company expanded market investment, increase spending for business growth.

4.3 Pyramidal Decomposition and Influence Quantification

Pyramidal decomposition is use to analyze which factors have impact on its value or evolution. The principle is to express basic ratios as a product of component ratios. The fundamental example of pyramidal decomposition is the DuPont analysis, which is the decomposition of return to equity (ROE) ratio by three component ratios.

Tab 4.16 Details of ROE decomposition 2008-2012 (%)

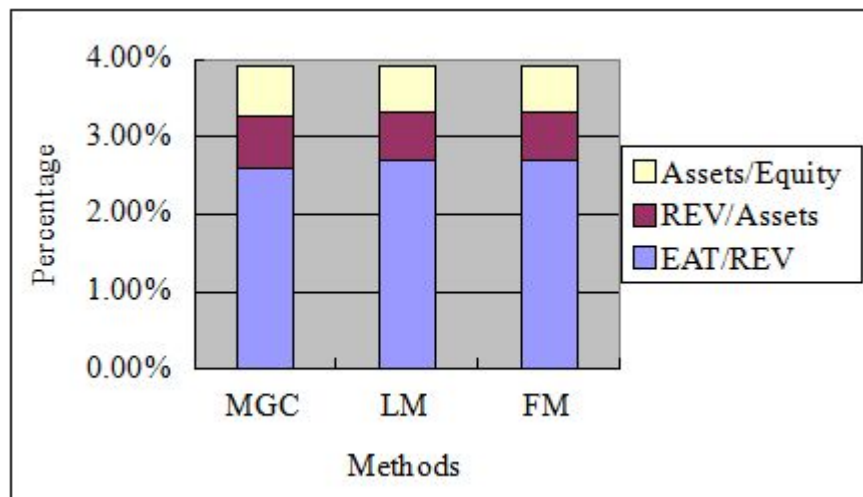
	2008	2009	2010	2011	2012
Net income/Rev.	15.24	17.52	16.13	14.71	13.03
Rev./Assets	55.04	56.88	61.59	58.62	63.28
Assets/Equity	207.20	213.68	208.62	203.46	206.52
return on equity	17.38	21.29	20.73	17.54	17.03

Influence quantification enables to analyze indicators, whose change have cause change in the basic ratios. We have three methods for quantification of influence: methods of gradual changes, logarithmic decomposition method, and functional decomposition method. Now we can compare three methods

Tab 4.17 Details of three methods during 2008-2009

Method of gradual changes(2008-2009)					
	2008	2009	Δa	ΔROE	Order
EAT/REV	15.24%	17.52%	2.28%	2.60%	1
REV/Assets	55.04%	56.88%	1.84%	0.67%	3
Assets/Equity	207.20%	213.68%	6.48%	0.65%	2
SUM				3.92%	
Logarithmic decomposition method(2008-2009)					
	2008	2009	Ia	ΔROE	Order
EAT/REV	15.24%	17.52%	114.99%	2.69%	1
REV/Assets	55.04%	56.88%	103.34%	0.63%	3
Assets/Equity	207.20%	213.68%	103.13%	0.59%	2
SUM				3.92%	
Functional decomposition method(2008-2009)					
	2008	2009	Ra	ΔROE	Order
EAT/REV	15.24%	17.52%	14.99%	2.69%	1
REV/Assets	55.04%	56.88%	3.34%	0.63%	3
Assets/Equity	207.20%	213.68%	3.13%	0.59%	2
SUM				3.92%	

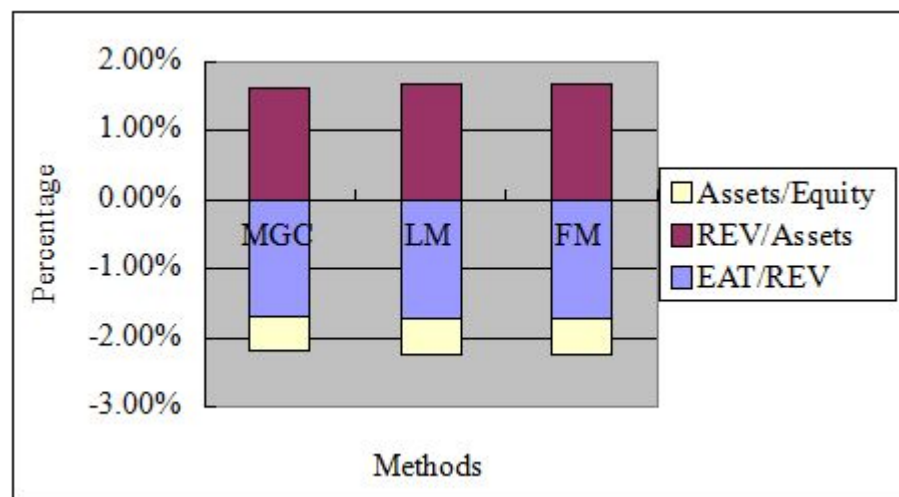
Chart 4.25 Factors structure in three methods during 2008-2009



Tab 4.18 Details of three methods during 2009-2010

Method of gradual changes(2009-2010)					
	2009	2010	Δa	ΔROE	Order
EAT/REV	17.52%	16.13%	-1.38%	-1.68%	1
REV/Assets	56.88%	61.59%	4.71%	1.62%	2
Assets/Equity	213.68%	208.62%	-5.07%	-0.50%	3
SUM				-0.56%	
Logarithmic decomposition method(2009-2010)					
	2009	2010	Ia	ΔROE	Order
EAT/REV	17.52%	16.13%	92.10%	-1.73%	1
REV/Assets	56.88%	61.59%	108.27%	1.67%	2
Assets/Equity	213.68%	208.62%	97.63%	-0.50%	3
SUM				-0.56%	
Functional decomposition method(2009-2010)					
	2009	2010	Ra	ΔROE	Order
EAT/REV	17.52%	16.13%	-7.90%	-1.73%	1
REV/Assets	56.88%	61.59%	8.27%	1.67%	2
Assets/Equity	213.68%	208.62%	-2.37%	-0.50%	3
SUM				-0.56%	

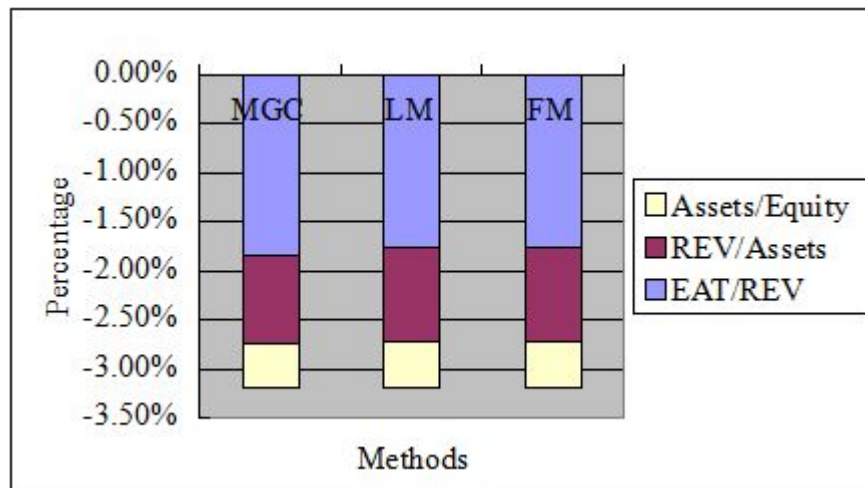
Chart 4.26 Factors structure in three methods during 2009-2010



Tab 4.19 Details of three methods during 2010-2011

Method of gradual changes(2010-2011)					
	2010	2011	Δa	ΔROE	Order
EAT/REV	16.13%	14.71%	-1.43%	-1.84%	2
REV/Assets	61.59%	58.62%	-2.97%	-0.91%	1
Assets/Equity	208.62%	203.46%	-5.16%	-0.44%	3
SUM				-3.19%	
Logarithmic decomposition method(2010-2011)					
	2010	2011	Ia	ΔROE	Order
EAT/REV	16.13%	14.71%	91.15%	-1.77%	2
REV/Assets	61.59%	58.62%	95.18%	-0.94%	1
Assets/Equity	208.62%	203.46%	97.53%	-0.48%	3
SUM				-3.19%	
Functional decomposition method(2010-2011)					
	2010	2011	Ra	ΔROE	Order
EAT/REV	16.13%	14.71%	-8.85%	-1.77%	2
REV/Assets	61.59%	58.62%	-4.82%	-0.94%	1
Assets/Equity	208.62%	203.46%	-2.47%	-0.48%	3
SUM				-3.19%	

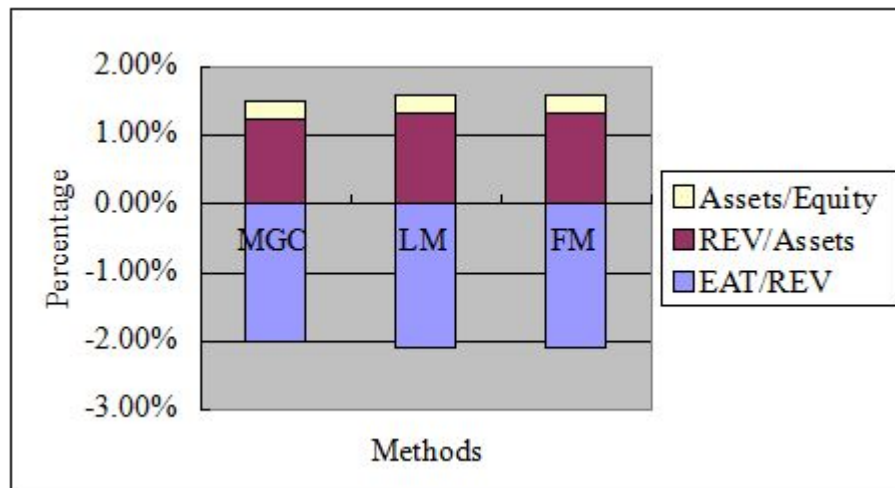
Chart 4.27 Factors structure in three methods during 2010-2011



Tab 4.20 Details of three methods during 2011-2012

Method of gradual changes(2011-2012)					
	2011	2012	Δa	ΔROE	Order
EAT/REV	14.71%	13.03%	-1.68%	-2.00%	2
REV/Assets	58.62%	63.28%	4.66%	1.23%	1
Assets/Equity	203.46%	206.52%	3.06%	0.25%	3
SUM				-0.51%	
Logarithmic decomposition method(2011-2012)					
	2011	2012	Ia	ΔROE	Order
EAT/REV	14.71%	13.03%	88.61%	-2.09%	2
REV/Assets	58.62%	63.28%	107.94%	1.32%	1
Assets/Equity	203.46%	206.52%	101.50%	0.26%	3
SUM				-0.51%	
Functional decomposition method(2011-2012)					
	2011	2012	Ra	ΔROE	Order
EAT/REV	14.71%	13.03%	-11.39%	-2.09%	2
REV/Assets	58.62%	63.28%	7.94%	1.32%	1
Assets/Equity	203.46%	206.52%	1.50%	0.26%	3
SUM				-0.51%	

Chart 4.28 Factors structure in three methods during 2011-2012



Tab 4.21 Differences between three methods

	2008-2009		
	MGC	LM	FM
EAT/REV	2.60%	2.69%	2.69%
REV/Assets	0.67%	0.63%	0.63%
Assets/Equity	0.65%	0.59%	0.59%
SUM	3.92%	3.92%	3.92%
	2009-2010		
	MGC	LM	FM
EAT/REV	-1.68%	-1.73%	-1.73%
REV/Assets	1.62%	1.67%	1.67%
Assets/Equity	-0.50%	-0.50%	-0.50%
SUM	-0.56%	-0.56%	-0.56%
	2010-2011		
	MGC	LM	FM
EAT/REV	-1.84%	-1.77%	-1.77%
REV/Assets	-0.91%	-0.94%	-0.94%
Assets/Equity	-0.44%	-0.48%	-0.48%
SUM	-3.19%	-3.19%	-3.19%
	2011-2012		
	MGC	LM	FM
EAT/REV	-2.00%	-2.09%	-2.09%
REV/Assets	1.23%	1.32%	1.32%
Assets/Equity	0.25%	0.26%	0.26%
SUM	-0.51%	-0.51%	-0.51%

From Tab 4.21, it shows the differences are very tiny between method of gradual

changes, logarithmic decomposition method and functional decomposition method, which can't effect the orders. So we can ignore the normal changes. Viewing Tab 4.17-Tab 4.20, and Chart 4.25-Chart 4.28, it shows the most important factor is net profit margin (EAT/Rev.) in 2008-2009 and 2009-2010, the second one is total assets turnover (Rev./Assets), and the third one is financial leverage. But in 2010-2011 and 2011-2012, the order is different, the first is total assets turnover, the second is net profit margin and the third is financial leverage. In fact, net profit margin is the core of pyramidal decomposition of a company. In Tab 4.16, we can see after 2008, the net profit margin increase from 15.24% to 17.24% in 2009, which makes the increase in return on equity from 17.38% to 21.29% at the same time. About the financial leverage, it shows in Tab 4.16 that it decrease after 2009 and with the lowest result in 2011 (203.46%). That's because of the increase in assets and decrease in equity of P&G, and the speed of decreasing is slower the speed of increasing.

5.Result summary

According to above indexes from chapter 3 and chapter 4, P&G company is indeed a strong blue chip company, But it must be cut inventories and daily office expense, optimization of investment project, in order to obtain the maximum benefit.

Generally speaking, during 2008-2012, the financial situation of P&G company is not good. From the income statement we can find that, in 2012, the net profit of P&G company is \$10,904 million, a decrease of 9.70% compared to 2008. And the other financial indicators are decreasing. For the reason that, one is because P&G company has not fully recovered from the effects of the financial crisis. Another reason, which is the primary cause, is P&G itself.

P&G Company announced a "177 years of the most crazy, the most radical" -- to decide in the next two years off the group's 100 brands in the last year (2014), in order to achieve the purpose of growth. For the whole company, this decision is not easy.

If don't peel off the brands, P&G company is a large group with 180 brands. Since the merger and acquisition techniques, growing the company by market capitalization, however P&G on brand management and marketing, has been the industry look up to as the standard for a long time. P&G Company should not be influenced too much in chance of interference, and should establish its leading position in the market is at the key category.

6. Conclusion

After these five chapters, we completed the financial analysis of P&G company at a certain period from 2008 to 2012.

In chapter 2, it is some introductions of financial analysis methodology.

In chapter 3, it is the general description of P&G company about its financial situation. In this chapter, we can have a general understand about P&G company, which helps us to do the financial analysis in the next chapter.

Chapter 4 is the main part of the whole bachelor thesis. At first, we used the common-size analysis to analyze three financial statement, balance sheet, income statement and cash flow statement. Then we used the financial ratios analysis to analyze the changes of financial situation during these five years. Finally is the pyramidal decomposition and influence quantification, we divided the return on equity(ROE) into three parts and we used three different methods to calculate, we got different results from different methods while the differences are very tiny, but it didn't influence the final results.

At the end in chapter 5, it is the results summary. The financial crisis in 2008 has make a great impact on the whole world including P&G company. P&G company got rid of the impact of the financial crisis gradually at next few years but not completely.

At present, P&G is the one of the world's largest daily consumer company. Everything we use in daily life is from P&G company. P&G has been integrated into our life.

BIBLIOGRAPHY

[1] ELAINE, Henry. *International Financial Statement Analysis*. New York: Wiley, 2008. 828 p. ISBN 9780470287668.

[2] FRIDON, Matin S. and Fernando ALVAREZ. *Financial Statement Analysis: A Practitioner's Guide*. 4th ed. New York: Wiley, 2011. 378 p. ISBN 9780470635605.

[3] WHITE, Gerald L. *Analysis and Use of Financial Statements*. 3rd ed. New York: Wiley, 2002. 784 p. ISBN 9780471375944.

[4] The annual report of P&G. (2008-2012) [online]. Available on.
http://www.dekujimaminko.pg.com/en_US/index.shtml

[5] Wikipedia [online]. Available on.
<http://en.wikipedia.org/wiki/>

LIST of ABBREVIATIONS

OPM	Operating Profit Margin
NPM	Net Profit Margin
EBIT	Earning Before Interest Tax
EAT	Earning After Tax
ROA	Return on Assets
ROE	Return on Equity

Declaration of Utilisation of Results from a Diploma (Bachelor) Thesis

Herewith I declare that

I am informed that Act No. 121/2000 Coll. – the Copyright Act, in particular, Section 35 – Utilisation of the Work as a Part of Civil and Religious Ceremonies, as a Part of School Performances and the Utilisation of a School Work – and Section 60 – School Work, fully applies to my diploma (bachelor) thesis;

I take account of the VSB – Technical University of Ostrava (hereinafter as VSB-TUO) having the right to utilize the diploma (bachelor) thesis (under Section 35(3)) unprofitably and for own use ;

I agree that the diploma (bachelor) thesis shall be archived in the electronic form in VSB-TUO's Central Library and one copy shall be kept by the supervisor of the diploma (bachelor) thesis. I agree that the bibliographic information about the diploma (bachelor) thesis shall be published in VSB-TUO's information system;

It was agreed that, in case of VSB-TUO's interest, I shall enter into a license agreement with VSB-TUO, granting the authorization to utilize the work in the scope of Section 12(4) of the Copyright Act;

It was agreed that I may utilize my work, the diploma (bachelor) thesis or provide a license to utilize it only with the consent of VSB-TUO, which is entitled, in such a case, to claim an adequate contribution from me to cover the cost expended by VSB-TUO for producing the work (up to its real amount).

Ostrava dated 7th May, 2015

Meng han Pan

.....
Student's name and surname

List of Annexes

Annex 1 Balance Sheet

Annex 2 Income Statement

Annex 3 Cash Flow Statement

Annex 1 Balance Sheet

\$ million	2008	2009	2010	2011	2012
ASSETS					
CURRENT ASSETS					
cash and cash equivalents	\$3,313	\$4,781	\$2,879	\$2,768	\$4,436
Account receivable	6,761	5,836	5,335	6,275	6,068
INVENTORIES					
Materials and supplies	2,262	1,557	1,692	2,153	1,740
Work in process	765	672	604	717	685
Finished goods	5,389	4,651	4,088	4,509	4,296
Total inventories	8,416	6,880	6,384	7,379	6,721
Deferred income taxes	2,012	1,209	990	1,140	1,001
Prepaid expenses and other current assets	4,013	3,199	3,194	4,408	3,684
TOTAL CURRENT ASSETS	24,515	21,905	18,782	21,970	21,910
PROPERTY PLANT AND EQUIPMENT					
Buildings	7,052	6,724	6,868	7,753	7,324
Machinery and equipment	30,145	29,042	29,294	32,820	32,029
Land	889	885	850	934	880
Total property plant and equipment	38,086	36,651	37,012	41,507	40,232
Accumulated depreciation	-17,446	-17,189	-17,768	-20,214	-19,856
NET PROPERTY PLANT AND EQUIPMENT	20,640	19,462	19,244	21,293	20,377
GOODWILL AND OTHER INTANGIBLE ASSETS					
Goodwill	59,767	56,512	54,012	57,562	53,773
Trade marks and other intangible assets net	34,233	32,606	31,636	32,620	30,988
NET GOODWILL AND OTHER INTANGIBLE ASSETS	94,000	89,118	85,648	90,182	84,761
TOTAL LONG-TERM ASSETS	114,640	108,580	87,892	114,475	105,138
OTHER NONCURRENT ASSETS	4,837	4,348	4,498	4,909	5,196
TOTAL ASSETS	143,992	134,833	128,172	138,354	132,244
	119477	112928	109390	116384	110334
Liabilities and Shareholders' Equity					
CURRENT LIABILITIES					
Accounts payable	6,775	5,980	7,251	8,022	7,920
Accrued and other liabilities	11,099	8,601	8,559	9,290	8,289
Debt due within one year	13,084	16,320	8,472	9,981	8,698
TOTAL CURRENT LIABILITIES	30,958	30,901	24,282	27,293	24,907
LONG-TERM DEBT	23,581	20,652	21,360	22,033	21,080
DEFERRED INCOME TAXES	11,805	10,752	10,902	11,070	10,132
OTHER NONCURRENT LIABILITIES	8,154	9,429	10,198	9,957	12,090
TOTAL NONCURRENT LIABILITIES	43,540	40,833	42,460	43,060	43,302

TOTAL LIABILITIES	74,498	71,734	66,733	70,353	68,209
SHAREHOLDERS' EQUITY					
Convertible class A preferred stock, stated	1,366	1,324	1,277	1,234	1,195
Non-voting class B preferred stock, stated					
Common stock, stated value \$1 per share<10,000 shares authorized>	4,002	4,007	4,008	4,008	4,008
Additional paid-in capital	60,307	61,118	61,697	62,405	63,181
Reserve for ESOP debt retirement	-1,325	-1,340	-1,350	-1,357	-1,357
Accumulated other comprehensive	3,746	-3,358	-7,822	-2,054	-9,333
Treasury stock, at cost	-47,588	-55,961	-61,309	-67,278	-69,604
Retained earnings	48,986	57,309	64,614	70,682	75,349
TOTAL	69,494	63,099	61,439	68,001	64,035
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	143,992	134,833	128,172	138,354	132,244

Annex 2 Income Statement

\$ million	2008	2009	2010	2011	2012
NET SALES	79,257	\$76,694	\$78,938	\$81,104	\$83,680
cost of products sold	39,261	38,690	37,919	39,859	42,391
selling, general and administrative expense	24,017	22,630	24,998	25,750	26,421
Goodwill and indefinite lived intangible asset impairment charges	-	-	-	-	1,576
Operating income	15,979	15,374	16,021	15,495	13,292
interest expense	1,467	1,358	946	831	769
other non-operating income/expense, net	373	397	-28	333	262
EARNING BEFORE INCOME TAXES	14,885	14,413	15,047	14,997	12,785
income taxes on continuing operations	3,594	3,594	4,101	3,299	3,468
NET EARNINGS FROM CONTINUING OPERATIONS	11,291	10,680	10,946	11,698	9,317
NET EARNINGS FROM DISCONTINUED OPERATIONS	784	2,756	1,790	229	1,518
NET EARNINGS	12,075	13,436	12,736	11,927	10,904
BASIC NET EARNINGS PER COMMON SHARE					
earnings from continuing operations	\$3.61	\$3.55	\$3.70	\$4.04	\$3.24
earnings from discontinued operations	0.25	0.94	0.62	0.08	0.58
DILUTED NET EARNING PER COMMON SHARE					
earning from continuing operations	3.4	3.39	3.53	3.85	3.12
earning from discontinued operations	0.24	0.87	0.58	0.08	0.54
DILUTED NET EARNINGS PER COMMON SHARE	3.64	4.26	4.11	3.93	3.66
DIVIDENDS PER COMMON SHARE	1.45	1.64	1.8	1.97	2.14

Annex 3 Cash Flow Statement

\$ million	2008	2009	2010	2011	2012
CASH AND CASH EQUIVALENTS,BEGINNING OF YEAR	\$5,354	\$3,313	\$4,781	\$2,879	\$2,768
OPERATING ACTIVITIES					
net earnings	12,075	13,436	12,736	11,927	10,904
depreciation and amortization	3,166	3,082	3,108	2,838	3,204
share-based compensation expense	555	516	453	414	377
deferred income taxes	1,214	596	36	128	65
gain on sale of businesses	-284	-2,377	-2,670	-203	-2,106
change in accounts receivable	432	415	-14	-426	-427
change in inventories	-1,050	721	86	-501	77
change in accounts payable,accrued and other liabilities	297	-742	2,446	358	-22
change in other operating assets and liabilities	-1,270	-758	-305	-1,221	-444
others	-127	30	196	210	210
TOTAL OPERATING ACTIVITIES	15,008	14,919	16,072	13,330	13,284
INVESTING ACTIVITIES					
proceed from assets sales	928	1,087	3,068	225	2,893
capital expenditures	-3,046	-3,238	-3,067	-3,306	-3,964
acquisitions,net of cash acquired	-361	-368	-425	-474	-134
change in investments	-50	166	-173	73	112
TOTAL INVESTING ACTIVITIES	-2,549	-2,353	-597	-3,482	-1,093
FINANCING ACTIVITIES					
dividends to shareholders	-4,655	-5,044	-5,458	5,767	-6,139
change in short-term debt	2,650	-2,420	-1,798	151	-3,412
addition to long-term debt	7,088	4,926	3,830	1,536	3,985
reductions of long-term debt	-11,747	-2,587	-8,546	-206	-2,549
treasury stock purchases	-10,047	-6,370	-6,004	-7,039	-4,024
impact of stock options and others	1,867	681	721	1,203	1,729
TOTAL FINANCING ACTIVITIES	-14,844	-10,814	-17,255	-10,122	-10,410
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	344	-284	-122	163	113
CHANGE IN CASH AND CASH EQUIVALENTS	-2,041	1,468	-1,902	-111	1,668
CASH AND CASH EQUIVALENTS,END OF YEAR	3,313	4,781	2,897	2,768	4,436